MS. HOWES: IT IS TOUGH TO FOLLOW TWO COAL
5 GUYS AND TALK ABOUT NUCLEAR, BUT I'M GOING TO GIVE IT
6 A SHOT. I'M GOING TO START WITH A QUOTE FROM OUR
7 CEO. I WANT TO BE OPTIMISTIC. WE BELIEVE, AT
8 EXELON, THAT WE CAN REDUCE GREENHOUSE GAS EMISSIONS,
9 BUT IT'S NOT GOING TO BE EASY, AND IT'S NOT GOING TO
10 BE CHEAP, AND WE'RE GOING TO HAVE TO HAVE SIGNIFICANT
11 INVESTMENT IN TECHNOLOGY. AND BRUCE OUTLINED SOME OF
12 THE CHALLENGES ON THE COAL SIDE OF THE EQUATION. AND
13 THERE WILL BE LOTS OF TECHNOLOGY CHALLENGES. IF YOU
14 REMEMBER HIS EPRI CHART, THERE'S A LOT OF TECHNOLOGY
15 THAT HAS TO BE DEVELOPED IN ORDER FOR US TO REACH
16 THOSE CO2 CONCENTRATION LIMITS WE WERE TALKING ABOUT
17 THIS MORNING. BUT ON THE OPTIMISTIC END, I WANT TO
18 POINT OUT ONE THING. THERE ARE COMPANIES LIKE AEP
19 AND EXELON THAT EVEN IN THE ABSENCE OF FEDERAL
20 LEGISLATION ARE SPENDING MONEY NOW TO REDUCE THEIR
21 OWN GREENHOUSE GAS EMISSIONS, AND THEY'RE INVESTING
22 IN TECHNOLOGY NOW TO PREPARE FOR A LOW-CARBON FUTURE.
23 SO THERE IS A REASON TO BE OPTIMISTIC.
24 I WANT TO GIVE YOU, OR START BY TALKING A
25 LITTLE BIT ABOUT EXELON AND OUR POSITION ON CLIMATE
0233
1 LEGISLATION. IT IS JUST TO PROVIDE SOME CONTEXT FOR
2 MY FURTHER DISCUSSION. THEN I'M GOING TO TALK ABOUT
3 OUR VOLUNTARY GREENHOUSE GAS GOAL BECAUSE I THINK IT
4 ILLUSTRATES WHAT SOME OF THE BUSINESS OPPORTUNITIES
5 ARE, AND THEN I WOULD BE REMISS IF I DIDN'T TALK
6 ABOUT NEW NUCLEAR POWER PLANTS.
7 EXELON IS ONE OF THE LARGEST INTEGRATED
8 ELECTRIC UTILITIES. "INTEGRATED ELECTRIC UTILITIES"
9 MEANS THAT WE HAVE BOTH GENERATION AS WELL AS
10 DISTRIBUTION COMPANIES. OUR COMPANY WAS FORMED WITH
11 THE MERGER OF COMMONWEALTH EDISON IN CHICAGO AND
12 PHILADELPHIA ELECTRIC POWER COMPANY IN PHILADELPHIA,
13 PECO. WE HAVE 5.2 MILLION ELECTRIC CUSTOMERS, NOT
14 QUITE AS GEOGRAPHICALLY DISPERSED AS AEP. OUR
15 CUSTOMERS ARE IN THE CHICAGO AREA AND IN THE
16 PHILADELPHIA AREA. BUT WHAT DISTINGUISHES US IS THAT
17 OUR GENERATION IS LARGELY NUCLEAR-BASED. IF YOU LOOK
18 AT THE PIE CHART IN THE LOWER CORNER, 92 PERCENT OF
19 THE ELECTRICITY WE PRODUCE COMES FROM NUCLEAR POWER.
20 THE REMAINING PERCENTAGES COME FROM -- 7 PERCENT,
21 ROUGHLY, FROM COAL, OIL, AND GAS, AND ABOUT 1 PERCENT
22 FROM RENEWABLE ENERGY. WE'RE A BIG NUCLEAR PLAYER.
23 WE DON'T QUITE PRODUCE 20 PERCENT OF THE ELECTRICITY

24 FROM NUCLEAR. ABOUT 20 PERCENT OF THE ELECTRICITY
25 THAT IS PRODUCED IN THE U.S. COMES FROM NUCLEAR
0234
1 POWER. WE'RE A BIG PLAYER, BUT WE DON'T PRODUCE ALL
2 OF IT, JUST TO SET THE RECORD STRAIGHT.
3 BUT HERE IS TO GIVE YOU A SENSE OF OUR
4 GREENHOUSE GAS EMISSIONS RELATIVE TO THE OTHER BIG
5 PLAYERS. HERE, BRUCE, I MADE YOU THE NUMBER ONE
6 GENERATOR IN THE U.S. THIS IS 2004 DATA. WE'RE THE
7 NUMBER FOUR IN TERMS OF GENERATION, BUT WE HAVE ONE
8 OF THE SMALLEST GREENHOUSE GAS FOOTPRINTS. WE
9 PRODUCE ROUGHLY, DEPENDING ON THE YEAR, 12 TO
10 13 MILLION METRIC TONS OF CO2 ANNUALLY AND YOU CAN ADD
11 ANOTHER MILLION METRIC TONS IF YOU FACTOR IN THE
12 REMAINING GREENHOUSE GASSES. SO WE HAVE A RELATIVELY
13 SMALL GREENHOUSE GAS FOOTPRINT RELATIVE TO SOME OF
14 THE OTHER MAJOR PLAYERS, BUT IT GIVES YOU A SENSE OF
15 HOW MANY PLAYERS THERE ARE IN THE UTILITY SECTOR --
16 THIS IS JUST THE TOP 10 -- AND HOW DIVERSE THEIR
17 GENERATION PORTFOLIOS ARE.
18 LET ME TALK FIRST ABOUT OUR POSITION ON
19 FEDERAL CLIMATE CHANGE LEGISLATION. WE BELIEVED THAT
20 THE SCIENCE WAS REAL MANY YEARS AGO. WE ARE ONE OF
21 THE FEW UTILITIES THAT'S BEEN ACTIVE IN THE DEBATE IN
22 WASHINGTON. JOHN ROWE, WHO IS OUR CHAIRMAN,
23 PRESIDENT, AND CEO, WAS A MAJOR PLAYER IN THE
24 NATIONAL COMMISSION ON ENERGY POLICY; AND THEY PUT
25 OUT THEIR FIRST REPORT IN DECEMBER OF 2004. MORE
0235
1 RECENTLY, WE HAVE BEEN PARTICIPATING IN THE U.S.
2 CLIMATE ACTION PARTNERSHIP, USCAP. THE WHOLE PURPOSE
3 OF USCAP IS TO GET LIKE-MINDED COMPANIES WORKING
4 TOWARD VIABLE FEDERAL LEGISLATION TO CONTROL
5 GREENHOUSE GASSES. WE'RE ALSO A MEMBER OF THE PEW
6 BUSINESS ENVIRONMENTAL LEADERSHIP COUNCIL.
7 SO WHAT HAVE WE BEEN LOBBYING FOR AND WHY
8 ARE WE INVOLVED? ONE OF THE REASONS WE'RE INVOLVED,
9 ONE OF THE REASONS UTILITIES ARE INVOLVED IS WE HAVE
10 A BIG TARGET ON OUR BACKS. WE WILL BE ONE OF THE
11 FIRST INDUSTRIES THAT WILL BE REGULATED. EVERY BILL
12 THAT YOU SAW IN THAT VERY-SMALL-FONT SLIDE THIS
13 MORNING, VIRTUALLY EVERY ONE OF THEM HAS UTILITIES TO
14 BE REGULATED AND, THEREFORE, OUR INTEREST IN BEING
15 PART OF THE DISCUSSION.
16 AND WHY ARE UTILITIES TARGETED? IN PART,
17 BECAUSE ABOUT A THIRD OF THE EMISSIONS IN THE U.S.,

18 GREENHOUSE GAS EMISSIONS, COME FROM THE ELECTRICITY
19 SECTOR. SO WE'RE PART OF THE PROBLEM. ANOTHER THIRD
20 COMES FROM THE TRANSPORTATION SECTOR; AND ROUGHLY
21 ANOTHER THIRD COMES FROM THE INDUSTRIAL/COMMERCIAL
22 SECTOR. FROM OUR PERSPECTIVE, YES, UTILITIES SHOULD
23 BE REGULATED; BUT WE THINK THE REGULATION SHOULD BE
24 ECONOMY-WIDE. WE NEED TO COVER ALL OF THOSE SECTORS
25 IN ORDER TO REDUCE GREENHOUSE GASSES TO WHAT YOU WILL
0236
1 DETERMINE WILL BE ACCEPTABLE LEVELS.
2 WE ALSO WANT MANDATORY STANDARDS. WHILE WE
3 HAVE VOLUNTEER COMMITMENT TO REDUCE OUR OWN
4 GREENHOUSE GASSES, AS DOES AEP, WE REALIZE THAT WE
5 NEED A MANDATORY PROGRAM IN ORDER TO DRIVE THE LEVEL
6 OF CHANGE THAT IS NECESSARY.
7 WE'RE SUPPORTIVE OF A CAP-AND-TRADE
8 PROGRAM, IN PART BECAUSE WE WORK IN COMPETITIVE
9 ELECTRICITY MARKETS. WE LIKE MARKET MECHANISMS. WE
10 THINK THAT WILL HELP DRIVE EFFICIENCY IN REDUCING
11 EMISSIONS.
12 ONE OF THE ISSUES THAT I'D SAY IS HOTLY
13 DEBATED -- BRUCE WILL ATTEST -- WITHIN THE
14 ELECTRICITY SECTOR IS HOW TO ALLOCATE ALLOWANCES.
15 BECAUSE WE BELIEVE THAT IN ORDER TO MAKE A
16 FUNDAMENTAL SHIFT TO A LOW-CARBON TECHNOLOGY,
17 EVERYBODY, IN THEIR ENERGY PRICES, HAS TO SEE A COST
18 OF CARBON. AND SO FROM OUR PERSPECTIVE, WE THINK THE
19 ALLOWANCES SHOULD BE ALLOCATED TO THE DISTRIBUTION
20 UTILITIES THROUGH THE COMED'S OR THE PECO'S OR
21 WHOEVER YOU BUY YOUR ELECTRICITY FROM. THEY WILL
22 SELL THOSE ALLOWANCES. THE DOLLARS THEY GET FROM
23 THOSE SALES CAN THEN BE ALLOCATED BACK TO THEIR
24 CUSTOMERS FOR REBATES, IN PART BECAUSE CUSTOMERS ARE
25 GOING TO BEAR THE PRICE OF THE COST OF CARBON. SO
0237
1 EVERYONE IN THIS ROOM IS GOING TO HAVE A HIGHER
2 ELECTRICITY BILL, AND OUR NOTION IS THAT SOME OF
3 THOSE COSTS CAN POTENTIALLY BE REBATED BACK TO
4 CUSTOMERS TO SORT OF SMOOTH THE TRANSITION.
5 SO THIS IS WHAT WE HAVE BEEN DOING IN
6 WASHINGTON OVER THE LAST I'M GOING TO SAY FIVE YEARS,
7 AND WE'VE BEEN PRETTY ACTIVE IN THE DISCUSSIONS OF
8 THE BILLS THAT WERE REFERENCED THIS MORNING.
9 BUT AS TO BUSINESS OPPORTUNITIES, THE FIRST
10 ONE UP, I WOULD CHARACTERIZE AS IMPROVING OUR OWN
11 OPERATIONS. IN MAY OF 2005, WE SET A VOLUNTARY

12 GREENHOUSE GOAL. WE SAID THAT WE'D REDUCE OUR
13 GREENHOUSE GAS EMISSIONS 8 PERCENT BY THE END OF
14 2008, USING A 2001 BASELINE. WE'RE WELL ON OUR WAY.
15 AS A MATTER OF FACT, I THINK WE'RE GOING TO EXCEED
16 THAT GOAL. THERE WAS A LOT OF CONSTERNATION WHEN WE
17 SET IT BECAUSE THERE'S ALWAYS THE UNCERTAINTY OF
18 WHAT'S GOING TO HAPPEN IN THE MARKETPLACE.
19 LET ME ITEMIZE SOME OF THE THINGS WE DID.
20 WE CLOSED OLD, INEFFICIENT COAL PLANTS. WE GOT ABOUT
21 50 PERCENT TOWARDS OUR GOAL WITH THOSE ACTIONS, AND
22 THEY HAVE OCCURRED OVER THE LAST COUPLE OF YEARS. WE
23 HAVE IMPROVED THE EFFICIENCY OF OUR OWN OPERATIONS,
24 REDUCING THE LEAKAGE OF SF6, WHICH IS AN INSULATING
25 GAS USED IN BREAKERS. IT ACHIEVES ABOUT 40 PERCENT
0238
1 OF OUR GOAL. TO GIVE YOU A METRIC ON OUR GOAL, WE
2 SAID WE WOULD REDUCE IT 8 PERCENT. THAT IS ROUGHLY
3 1.3 MILLION METRIC TONS, TO GIVE YOU AN ORDER OF
4 MAGNITUDE. REDUCING SF6 HAS REALLY DRAMATICALLY
5 HELPED US IN TERMS OF ACHIEVING THE GOAL. WE'VE ALSO
6 GOT A FUEL FLEET EFFICIENCY. WE USE BIODIESEL IN ALL
7 OF OUR DIESEL VEHICLES, AND ROUGHLY 40 PERCENT OF OUR
8 FLEET IS HYBRID VEHICLES, AND WE'RE LOOKING AT
9 EXPERIMENTING WITH A COUPLE OF ELECTRIC VEHICLES. SO
10 WE HAVE DONE A FAIR AMOUNT INSIDE TO TRY TO PREPARE
11 OURSELVES FOR A LOW-CARBON FUTURE, AND I THINK THESE
12 ARE THINGS THAT CAN EASILY BE DONE BY OTHER
13 BUSINESSES, EASILY BECAUSE THIS HAS NOT COST US A
14 WHOLE LOT OF MONEY TO GET THESE PARTICULAR
15 REDUCTIONS.
16 BUT I WANTED TO HIGHLIGHT ONE OF THEM, AND
17 IT UNDERSCORES SOMETHING BRUCE SAID ABOUT BUILDING
18 STANDARDS. IN 2005 WE DECIDED TO CONSOLIDATE SOME
19 OFFICE SPACE, AND IT'S IN THE LOOP IN CHICAGO. WE
20 WERE AT THREE DIFFERENT LOCATIONS. EMPLOYEES HAD TO
21 RUN BETWEEN LOCATIONS IN ORDER TO GET THEIR WORK
22 DONE. WE CONSOLIDATED THEM INTO ONE BUILDING. WE
23 DECIDED THAT WE WOULD RENOVATE THE BUILDING USING
24 U.S. GREEN BUILDING STANDARDS. WE DID SO. WE
25 RENOVATED TEN FLOORS OF A 1970S VINTAGE CHICAGO LOOP
0239
1 BUILDING, WHICH MEANS IT HAD THOSE DISGUSTING OLD
2 PARTITIONS, THE LIGHTING WAS HORRIBLE, THE AIR
3 QUALITY IN THE BUILDING WAS HORRIBLE. HOPEFULLY,
4 NONE OF YOU ARE RELATED TO THE OWNER OF THAT BUILDING
5 IN CHICAGO. BUT WE DID RENOVATE IT. WE USED GREEN

6 BUILDING STANDARDS, U.S. GREEN BUILDING STANDARDS.
7 WE ACHIEVED A PLATINUM CERTIFICATION FOR RENOVATED
8 BUILDINGS. WHEN WE STARTED OUT, WE WERE TOLD IT IS
9 GOING TO COST YOU 20 PERCENT MORE THAN A CONVENTIONAL
10 BUILDING RENOVATION. WE PROVED THEM WRONG. IT COST
11 US LESS THAN 5 PERCENT PREMIUM. WE EXPECT THAT WE
12 WILL REPAY THAT PREMIUM IN LESS THAN FIVE YEARS FROM
13 OUR ENERGY SAVINGS ALONE. WE ORIGINALLY PREDICTED --
14 AND THIS IS USING VERY CONVENTIONAL, ALBEIT SOMEWHAT
15 HIGH-TECH EQUIPMENT -- WE THOUGHT WE WOULD GET ABOUT
16 A 43-PERCENT REDUCTION IN OUR ELECTRICITY BILL. NINE
17 MONTHS OF DATA TELL US WE'RE GOING TO SURPASS
18 50 PERCENT. THIS IS DOABLE, THIS ABSOLUTELY IS
19 DOABLE, SO BUSINESS OPPORTUNITY, I THINK, FOR OTHER
20 BUSINESSES, I DON'T THINK WE'RE ATYPICAL, TO IMPROVE
21 THE EFFICIENCY OF THEIR OWN OPERATIONS.
22 WE'VE ALSO INVESTED IN RENEWABLES. WE SELL
23 REC'S, WHICH ARE RENEWABLE ENERGY CREDITS. IT IS
24 LARGELY DRIVEN BY RPS, RENEWABLE PORTFOLIO STANDARDS
25 THAT HAVE BEEN SET AT THE STATE LEVEL, WHICH DICTATE
0240
1 HOW MUCH RENEWABLES MUST BE PART OF THE GENERATION
2 MIX. WE SELL THOSE RENEWABLE ENERGY CREDITS INTO
3 BOTH THE VOLUNTARY MARKET AND A COMPLIANCE MARKET.
4 SO THE COMPLIANCE MARKET IS IN RESPONSE TO THE
5 RENEWABLE PORTFOLIO STANDARD. MOST OF THE STATES IN
6 WHICH WE DO BUSINESS HAVE A RENEWABLE PORTFOLIO
7 STANDARD. WHEN WE STARTED THE BUSINESS, WE LOST
8 MONEY IN THE FIRST COUPLE OF YEARS. NOW WE'RE IN THE
9 MONEY. AND THE REASON THAT WE'RE IN THE MONEY IS
10 BECAUSE OF THE SHORTAGE OF DEMAND OF RENEWABLE ENERGY
11 CREDITS. AND IF YOU SEE THOSE TWO STATEMENTS,
12 RENEWABLE ENERGY CREDITS FOR WIND HAVE MOVED FROM
13 ABOUT 15 BUCKS PER MEGAWATT HOUR UP TO 21 TO 23, AND
14 IT WILL PROBABLY INCREASE UNTIL SOMEONE BRINGS A NEW
15 PROJECT IN. VIRTUALLY ALL OF THE STATES IN WHICH WE
16 DO BUSINESS HAVE VERY AGGRESSIVE RENEWABLE PORTFOLIO
17 STANDARDS. SO THERE IS A ROLE FOR RENEWABLES. FOR
18 US RIGHT NOW, IT IS A SMALL-MARGIN BUSINESS. ON THE
19 OTHER HAND, THERE'S DEFINITELY SOME UP SIDE
20 POTENTIAL.
21 THE OTHER AREA I WANTED TO UNDERSCORE WAS
22 OUR CUSTOMER PROGRAM. IN PHILADELPHIA WE OFFER PECO
23 WIND. PECO WIND ALLOWS OUR CUSTOMERS TO PAY A
24 PREMIUM TO INCREASE THE AMOUNT OF WIND THAT'S
25 INTRODUCED INTO THE GRID. WE HAVE ONE OF THE LARGEST

0241
PROGRAMS IN THE U.S., 37,000 CUSTOMERS ARE PART OF THIS, WHICH SOUNDS LIKE A LARGE NUMBER. IT'S ABOUT 2 PERCENT OF OUR CUSTOMERS, BUT THERE IS A NICHE MARKET WHO WANT TO PAY A PREMIUM TO HAVE MORE RENEWABLE ENERGY. SO HERE, TOO, IS ANOTHER OPPORTUNITY, ANOTHER BUSINESS OPPORTUNITY FOR SOME COMPANY.

ENERGY EFFICIENCY FOR CUSTOMERS. BRUCE TOUCHED ON THIS, AS WELL. COMED, WHICH IS IN CHICAGO, FILED ON NOVEMBER 15 A 3-YEAR PLAN TO DELIVER ENERGY ELECTRICITY PROGRAMS TO CUSTOMERS. IN PART, IT IS TO HELP THEM REDUCE THE COST OF THEIR ELECTRICITY BILLS. I WILL BE PERFECTLY FRANK HERE. IN ILLINOIS THERE HAS NOT BEEN ENERGY EFFICIENCY PROGRAMS FOR MANY YEARS. WE'RE GOING AFTER THE LOW-HANGING FRUIT. RESIDENTIAL LIGHTING -- NO SURPRISE; APPLIANCE RECYCLING; RESIDENTIAL HOME BUILDING, MULTI-UNIT OPERATIONS; AND SOME COMMERCIAL AND INDUSTRIAL OPERATIONS.

I'M GOING TO DIVERGE A SECOND. I'LL GET MY MINUTES HERE.

HOW MANY OF YOU ARE FROM CALIFORNIA? OKAY. KEEP YOUR HANDS UP.

HOW MANY OF YOU HAVE COMPACT FLUORESCENTS IN YOUR HOUSES? OKAY. VIRTUALLY ALL OF YOU.

0242

HOW MANY OF YOU MADE A DECISION ABOUT APPLIANCES BASED ON ENERGY EFFICIENCY IN RECENT MONTHS? OKAY. VIRTUALLY ALL OF YOU. PUT YOUR HANDS DOWN.

FOR YOU NON-CALIFORNIA FOLKS, HOW MANY PEOPLE HAVE COMPACT FLUORESCENTS IN THEIR HOUSES? EXCELLENT.

OKAY, CALIFORNIA, YOU DON'T GET TO VOTE TWICE. YOU'RE MAKING IT LOOK BIGGER. OKAY.

HOW MANY OF YOU MADE A DECISION ABOUT APPLIANCES BASED ON ENERGY EFFICIENCY RECENTLY?

OKAY, YOU ARE VERY ATYPICAL.

(LAUGHTER)

WHEN I GIVE THE SPEECH -- TRULY, WHEN I GIVE THE SPEECH IN MOST PLACES, PEOPLE DO NOT HAVE A CLUE TO WHOM THEY PAY THEIR ELECTRICITY BILL; THEY DON'T HAVE A CLUE HOW MUCH THEY PAY IN THEIR ELECTRICITY BILL; THEY CAN'T TELL YOU WHAT THE RATE IS PER KILOWATT HOUR FOR THEIR ELECTRICITY BILLS. IT

20 JUST ISN'T ON THEIR RADAR SCREEN.
21 SO TRYING TO GET PEOPLE TO PRACTICE ENERGY
22 EFFICIENCY IS GOING TO BE A BIT OF AN UPHILL
23 CHALLENGE. YOU PEOPLE ARE, AS I SAID, VERY ATYPICAL
24 FOLKS. AND IF WE EXPECT TO GET WHAT WE WILL NEED TO
25 GET FROM ENERGY EFFICIENCY, THERE IS A LOT MORE
0243
1 EDUCATION THAT HAS TO HAPPEN.
2 OKAY. LET ME GET INTO NUCLEAR. I WANT TO
3 FOCUS ON NUCLEAR BECAUSE IT IS SUCH A BIG PART OF OUR
4 BUSINESS. I WANT TO BE REAL CLEAR UP FRONT. WE
5 REALIZE THAT WE HAVE TO OPERATE THESE PLANTS
6 EXCEPTIONALLY WELL; THAT IN ORDER TO MAINTAIN WHAT WE
7 SEE AS THE LICENSE TO OPERATE THESE, WE NEED TO
8 OPERATE THEM AT WORLD-CLASS LEVELS. AND WHAT I
9 PROVIDED HERE IS SOME EXAMPLES OF THE EFFORTS THAT WE
10 HAVE TAKEN IN ORDER TO MAINTAIN WORLD-CLASS CAPACITY.
11 IT SAYS CAPACITY FACTOR OF 93.6 PERCENT.
12 THIS MEANS IT WAS AVAILABLE ROUGHLY 94 PERCENT OF THE
13 TIME TO PRODUCE ELECTRICITY, WHICH MEANS IT IS
14 WORLD-CLASS.
15 WE WERE RANKED SECOND IN 2006 IN THE INPO
16 INDEX. I'M NOT GOING TO BORE YOU WITH THE INPO
17 INDEX. IT IS A MATHEMATICAL FORMULATION THAT I SWEAR
18 WAS DONE BY NUCLEAR NAVY GUYS, AND ONLY THEY CAN
19 UNDERSTAND WHAT IT MEANS. BUT LET ME TELL YOU WHAT
20 IT DOES REPRESENT: IT IS A METRIC THAT LOOKS AT
21 SEVERAL DOZEN PARAMETERS TO LOOK AT THE EFFECTIVENESS
22 AND THE EFFICIENCY OF OPERATIONS OF THE NUCLEAR
23 PLANTS. IT IS DONE FOR EVERY PLANT AROUND THE WORLD.
24 AND EVERY YEAR IT IS PUBLISHED TO DETERMINE WHO IS
25 DOING WELL AND WHO ISN'T DOING WELL. THERE IS A LOT
0244
1 OF PEER PRESSURE TO KEEP RAISING THE STANDARD.
2 EXELON IS ONE OF THE BEST-OPERATED NUCLEAR
3 POWER PLANTS AROUND THE WORLD. AND WHY IS IT? IF
4 YOU LOOK AT THE LAST TWO BULLETS, IN THE SIX YEARS
5 BETWEEN 2000 AND 2005, WE SPENT $2.3 BILLION ON
6 INCREASING THE EFFICIENCY, SO UPGRADES OF THE
7 GENERATING STATIONS, AS WELL AS REPLACING EQUIPMENT
8 TO MAINTAIN HIGH-CAPACITY FACTORS. AND WE WILL SPEND
9 AN EQUIVALENT AMOUNT OVER THE NEXT FIVE-YEAR PERIOD.
10 THEY RUN REALLY WELL. WE OPERATE THEM REALLY WELL.
11 WE OPERATE THEM VERY SAFELY. BUT THEY ARE EXPENSIVE.
12 SOMETHING TO KEEP IN MIND.
13 SO WHAT IS THE INDUSTRY DOING? I WOULD SAY

14 THE FIRST THING THE MAJORITY IN THE INDUSTRY ARE
15 DOING IS THEY ARE LOOKING AT LICENSE RENEWALS. WHAT
16 THIS CHART INDICATES, THOSE ARE OUR POWER PLANTS,
17 NAMES OF OUR POWER PLANTS, ON THE LEFT-HAND SIDE.
18 VIRTUALLY ALL OF THEM HAVE A 40-YEAR OPERATING
19 LICENSE, WHICH IS ESSENTIALLY AN ACCOUNTING PERIOD OF
20 TIME. THE NRC HAS SAID YOU CAN OPERATE FOR 40 YEARS;
21 AND AT THE END OF 40 YEARS, IF YOU WANT TO RUN THEM
22 SOME MORE, YOU GOT TO COME BACK AND GET ANOTHER
23 LICENSE, PLUS YOU HAVE TO DEMONSTRATE THAT YOU'RE
24 GOING TO CONTINUE TO OPERATE THEM VERY WELL AND VERY
25 SAFELY. SO, AS VIRTUALLY ALL OF THE OTHER OWNERS OF
0245
1 NUCLEAR POWER PLANTS, WE ARE GOING BACK TO HAVE OUR
2 LICENSES EXTENDED ANOTHER 20 YEARS. IF YOU SEE FROM
3 THIS TABLE, SIX OF OUR PLANTS HAVE ALREADY HAD THEIR
4 LICENSES RENEWED. WE ARE CURRENTLY WORKING ON OYSTER
5 CREEK, AND WE'RE LOOKING FOR A 20-YEAR LICENSE
6 RENEWAL FOR THAT FACILITY.
7 IMPORTANT TO NOTE, 48 U.S. REACTORS HAVE
8 BEEN RELICENSED TO DATE, SO THE FLEET WILL BE AROUND
9 ROUGHLY FOR ANOTHER 20 YEARS. TWELVE ADDITIONAL
10 REACTORS HAVE BEEN FILED FOR LICENSE RENEWALS, AND 20
11 MORE ARE EXPECTED TO APPLY FOR RENEWAL. SO YOU'RE
12 SEEING IN THE INDUSTRY A FOCUS ON EXTENDING THE
13 LICENSE OF THE EXISTING PLANTS. JUST TO BE CLEAR,
14 THERE IS A VERY HIGH BAR; THE NRC REQUIRES A LOT OF
15 EVIDENCE TO SUGGEST THAT THESE PLANTS CAN BE OPERATED
16 SAFELY FOR ANOTHER 20 YEARS.
17 ANNOUNCED NUCLEAR PROJECTS: 21 COMPANIES
18 SAID THAT THEY WILL BUILD NUCLEAR POWER PLANTS, AND
19 THAT'S ROUGHLY 39,000 MEGAWATTS. THAT'S WHAT'S BEEN
20 ANNOUNCED TO DATE. I THINK IT IS PRETTY FAIR TO SAY
21 THAT NOT ALL OF THESE PLANTS ARE GOING TO BE BUILT.
22 THE BEST GUESSTIMATE IN THE INDUSTRY IS THE FIRST
23 PLANT WILL BE BUILT SOMETIME IN THE 2016-TO-2020
24 PERIOD. IT IS LIKELY GOING TO BE LOCATED SOMEPLACE
25 IN THE SOUTHEAST PART OF THE U.S. BECAUSE THEY
0246
1 REQUIRE BASE LOAD GENERATION, AND THEY ARE IN
2 COST-OF-SERVICE STATES. AS BRUCE WAS SAYING, THE
3 COST CAN BE PASSED ON TO THE CUSTOMERS.
4 WHICH PLANTS? I CAN'T PREDICT AT THIS
5 PARTICULAR POINT. BUT I WILL POINT OUT TWO OF THEM,
6 AND I'M GOING TO POINT OUT DOMINION. DOMINION IS THE
7 SECOND LINE. THEY'RE PROPOSING A PLANT IN VIRGINIA.

8 THEY'RE PRETTY FAR ALONG IN TERMS OF SUBMITTING THEIR
9 COL, WHICH IS A CONSTRUCTION OPERATING LICENSE. WE,
10 TOO, HAVE ACRONYMS, BUT YOU GUYS BLEW ME AWAY THIS
11 MORNING WITH ALL OF YOUR ACRONYMS. I THINK YOU HAVE
12 MANY MORE THAN THE UTILITY SECTOR.
13 AND I'M GOING TO FOCUS ON EXELON BECAUSE
14 I'M GOING TO TALK ABOUT THOSE TWO NEXT.
15 SO WE COULD SEE SOME NEW NUCLEAR PLANTS,
16 BUT IT IS IN THE 2016-TO-2020 TIME FRAME. SO KEEP
17 THAT IN MIND.
18 LET ME TALK FIRST ABOUT EXELON. WE THINK
19 THAT NUCLEAR IS PART OF THE SOLUTION TO ADDRESS
20 CLIMATE CHANGE. I SHOULD NEVER SAY "SOLUTION." IT
21 IS ONE OF THE ACTIONS NECESSARY TO ADDRESS CLIMATE
22 CHANGE. WE DON'T THINK IT IS THE ONLY ANSWER.
23 CLEARLY, ENERGY EFFICIENCY RENEWABLES AND COAL WITH
24 CARBON CAPTURE AND SEQUESTRATION WILL BE NECESSARY,
25 BUT THERE WILL BE A NEED FOR NEW NUCLEAR PLANTS.
0247
1 WE HAVE PUT SOME CONDITIONS ON OUR
2 INVESTMENT IN NEW NUCLEAR PLANTS. FIRST, IT HAS GOT
3 TO BE COST-COMPETITIVE WITH A BASE LOAD UNIT, AND
4 WE'RE USING AS OUR BASE LOAD IGCC THAT YOU HEARD A
5 BIT ABOUT, WITH CARBON CAPTURE AND SEQUESTRATION,
6 THAT YOU HEARD ABOUT FROM BRUCE.
7 SECONDLY, THERE HAS TO BE CERTAINTY WITH
8 RESPECT TO LICENSING NEW PLANTS. MANY OF US IN THE
9 NUCLEAR INDUSTRY GOT CAUGHT IN THAT PERIOD WHERE WE
10 GOT A CONSTRUCTION LICENSE AND WE DIDN'T GET AN
11 OPERATING LICENSE UNTIL 14 YEARS LATER. SO YOU CAN
12 APPRECIATE THE COST OF HAVING THAT LONG A DELAY IN
13 OPERATING YOUR PLANT.
14 THE THIRD CONDITION IS THAT WE HAVE TO HAVE
15 MORE PASSIVE DESIGNS; AND BY THAT, I MEAN DESIGNS OF
16 NUCLEAR PLANTS THAT WILL FAIL LESS OFTEN BECAUSE THEY
17 HAVE FEWER VALVES AND FEWER MOTORS. AND I'LL TALK A
18 LITTLE BIT ABOUT THAT A LITTLE BIT LATER.
19 WE ALSO NEED TO HAVE SOME RESOLUTION OF
20 WHAT WE'RE GOING TO DO WITH THE SPENT FUEL. IT IS
21 PRETTY OBVIOUS TO US THAT YUCCA MOUNTAIN WILL NOT GO
22 AHEAD AS SCHEDULED. PERHAPS, THERE IS AN INTERIM
23 STORAGE ISSUE OR INTERIM STORAGE OPTION THAT THE
24 INDUSTRY AND DOE NEEDS TO CONSIDER, BUT THERE HAS TO
25 BE SOME RESOLUTION OF FUEL OR WHAT TO DO WITH USED
0248
1 FUEL. WE CAN STORE THE FUEL ON OUR SITES FOR

2 HUNDREDS OF YEARS. ON THE OTHER HAND, IT MAY BE MORE
3 EFFICIENT TO HAVE IT IN ONE CENTRALIZED LOCATION.
4 AND WE ALSO NEED PUBLIC SUPPORT FOR NEW NUCLEAR
5 PLANTS. ALL OF THESE FACTORS, THESE CONDITIONS,
6 REPRESENT BUSINESS RISKS FOR US; AND OUR JOB BEFORE
7 WE BUILD A NEW ONE IS TO TRY TO MINIMIZE THE AMOUNT
8 OF RISK ASSOCIATED WITH THESE, WITH THESE POTENTIAL
9 RISKS.
10 BUSY TABLE: I'M NOT GOING TO GO THROUGH
11 ALL OF THE NUMBERS. THE TWO I WANTED TO POINT OUT IS
12 JUST CAPITAL COST, IGCC WITH CARBON SEQUESTRATION.
13 THIS IS A DOE/EIA DATA SET. IT SUGGESTED CAPITAL
14 COST OF IGCC AT ROUGHLY $2,134 PER KILOWATT. BRUCE
15 SAID ROUGHLY 3. I SUSPECT IT'S NORTH OF THAT. BUT
16 THEN LOOK AT THE NUCLEAR COST. IT IS ROUGHLY $2,000
17 PER KILOWATT. I THINK THAT IS A LOW ESTIMATE.
18 HOWEVER, THAT IS OUR COMPARATOR. IT'S GOT TO BE COST
19 COMPETITIVE WITH IGCC, WITH CARBON SEQUESTRATION IN
20 ORDER FOR US TO GO AHEAD BECAUSE THOSE ARE BASE LOAD
21 OPERATIONS. I'VE THROWN A FEW MORE NUMBERS UP THERE
22 TO TANTALIZE YOU, AND MAYBE THERE WILL BE SOME
23 QUESTIONS ON IT GOING FORWARD.
24 SO WHAT IS THE ROAD MAP FOR A NEW NUCLEAR
25 PLANT? DECISION ONE IS TO FILE AN APPLICATION FOR A
0249
1 CONSTRUCTION OPERATING LICENSE. ONE OF THE REASONS
2 MOST COMPANIES ARE DOING IT IS BECAUSE THERE ARE
3 POTENTIAL TAX CREDITS IN THE ENERGY POLICY ACT IF YOU
4 FILE AN EARLY COL, CONSTRUCTION OPERATING LICENSE.
5 THE SECOND DECISION POINT IS TO STAND IN
6 LINE FOR CRITICAL COMPONENTS, BECAUSE THE NUCLEAR
7 INDUSTRY IS AN INTERNATIONAL INDUSTRY, AND WE'RE ALL
8 CHASING THE STEEL, THE EQUIPMENT THAT IS NECESSARY.
9 TO GIVE YOU A SENSE OF THE COST OF ONE AND TWO,
10 BECAUSE THEY ARE NOT INCONSEQUENTIAL, DOMINION, WHEN
11 IT TALKED ABOUT EXPANDING OR BUILDING A NEW UNIT AT
12 ONE OF THEIR EXISTING PLANTS, THE ESTIMATED COST OF
13 ONE AND TWO, $500 MILLION; $500 MILLION AND NOT EVEN
14 COMMITTED TO CONSTRUCT.
15 NUMBER THREE IS THE DECISION TO PROCEED
16 WITH CONSTRUCTION. ROUGH ESTIMATES OF THE COST OF A
17 NEW NUCLEAR POWER PLANT, $3 TO $5 BILLION. THESE ARE
18 HUGE INVESTMENTS. SO IF ANYONE THIS MORNING HAS ANY
19 DOUBT ABOUT THE NEED TO BE CERTAIN ABOUT YOUR CO2
20 LEVELS AND THE NEED FOR FURTHER RESEARCH, WE HAVE A
21 LOT OF MONEY RESTING ON THIS. I ENCOURAGE YOU TO BE

22 MORE EFFICIENT IN YOUR MEASUREMENTS OF CO2 EMISSIONS,
23 PLEASE.
24 LATER I WILL ASK BRUCE WHAT HE THINKS THE
25 ESTIMATED COST OF AN IGCC PLANT IS. IS IT CLOSE?
0250
1 IT'S PROBABLY PRETTY CLOSE.
2 SO WHAT HAVE WE DONE? THE FIRST STATEMENT,
3 I'M GOING TO SAY IT TWICE: WE HAVE NOT COMMITTED TO
4 BUILD A NEW NUCLEAR PLANT. WE HAVE NOT COMMITTED TO
5 BUILD A NEW NUCLEAR PLANT. HOWEVER, WE ARE WORKING
6 WITH COMPANIES WHO ARE TRYING TO STREAMLINE THE
7 CONSTRUCTION OPERATING LICENSE PROCESS. WE'RE
8 WORKING WITH WESTINGHOUSE AND GE ON A MORE PASSIVE
9 DESIGN. WE'VE SOUGHT AN EARLY SITE PERMIT FOR A
10 CLINTON PLANT IN ILLINOIS. BUT REMEMBER: WE ARE NOT
11 COMMITTING TO BUILD A NEW NUCLEAR POWER PLANT. OUR
12 SHAREHOLDERS WILL MAKE ME SAY THAT PROBABLY A THIRD
13 TIME. AND IN TEXAS WE'RE LOOKING AT POSSIBLE SITES
14 BECAUSE TEXAS HAPPENS TO BE AN ATTRACTIVE AREA
15 BECAUSE THEY NEED BASE LOAD GENERATION. SO WE ARE
16 LOOKING AT POSSIBLE NUCLEAR PLANTS IN TEXAS, BUT WE
17 HAVE NOT COMMITTED TO BUILD A NUCLEAR PLANT. HAVE
18 YOU GOT IT?
19 LET ME GO TO THE NEXT ONE VERY QUICKLY.
20 NUCLEAR DESIGNS. THE REASON WHY THIS IS IMPORTANT IS
21 THESE ARE THE DESIGNS THAT ARE BEING TALKED ABOUT.
22 WE HAVE COMMITTED TO THE GE-HITACHI DESIGN FOR OUR
23 TEXAS OPERATION SHOULD WE GO AHEAD. BUT WE'VE NOT
24 COMMITTED, RIGHT. YOU'VE GOT THAT. BUT MANY OTHER
25 DESIGNS ARE BEING CONSIDERED BY A RANGE OF OTHER
0251
1 COMPANIES WHO HAVE BEEN TALKING ABOUT NUCLEAR POWER
2 PLANTS.
3 SO, IN CLOSING, WE ARE ACTIVELY ENGAGED IN
4 THE CLIMATE CHANGE DEBATE. WE ARE MANAGING OUR OWN
5 EMISSIONS, AND WE'RE REDUCING THEM PRETTY
6 DRAMATICALLY. WE HAVE BEEN ADVOCATING FOR FEDERAL
7 LEGISLATION, AND WE BELIEVE THAT WE HAVE BEEN IN THE
8 VANGUARD OF COMPANIES WHO WILL DECIDE HOW CARBON
9 LEGISLATION WILL LOOK GOING FORWARD, AND WE THINK
10 THIS IS ALL NECESSARY IN ORDER TO BE READY FOR WHAT
11 WE THINK IS AN IMPERATIVE, WHICH IS A LOW-CARBON
12 ENERGY FUTURE.
13 THANK YOU.
14