THE BOSTON EDISON E-PLAN:

THE FASTEST PATH TO COMPETITION

PRESENTED TO THE MASSACHUSETTS INDUSTRY RESTRUCTURING ROUNDTABLE
JANUARY 22, 1996
BOSTON EDISON'S
RESTRUCTURING OBJECTIVES

A COMPETITIVE GENERATION MARKET

RETAIL CHOICE

LOWER RATES

FAIR TRANSITION
HOW DO WE GET THERE?

WORK TO IMPLEMENT RETAIL CHOICE AND A COMPETITIVE MARKET AS SOON AS POSSIBLE


DON'T WAIT FOR THE END POINT: BEGIN PRACTICAL TRANSITION STEPS EVEN SOONER

IMPLEMENT E-PLAN IN 1997
WHAT DOES E-PLAN DO?

MAKES THE LEAP TO A COMPETITIVE RATE STRUCTURE:

- SEPARATE T&D RATES
- AN IDENTIFIED ACCESS CHARGE
- HOURLY ENERGY RATES THAT FOLLOW THE REGIONAL POWER MARKET
- ELIMINATION OF THE FUEL ADJUSTMENT CLAUSE
WHAT DOES E-PLAN DO (cont.)?

ADOPTS PBR FOR BOTH T&D AND GENERATION

PROVIDES CONTINUITY WITH EXISTING CUSTOMER/UTILITY RELATIONSHIPS
WHAT DOES E-PLAN NOT DO?

IT DOES NOT CREATE A FULL, COMPETITIVE RETAIL MARKET IN 1997
E-PLAN OVERVIEW

RATE STRUCTURE:
  T & D
  ACCESS
  ENERGY

RATE LEVEL -
  ENERGY - VARIES HOURLY WITH MARKET
  NON ENERGY - FIXED, PERFORMANCE MEASURES

AVAILABLE TO ALL CUSTOMERS; HOURLY PRICES REQUIRE SUITABLE METERING
E-PLAN OVERVIEW (cont.)

RETAIL FRANCHISE OBLIGATIONS CONTINUE

PARTICIPATION BY ALL UTILITIES IN STATE DESIRABLE, BUT NOT NECESSARY

CONTINUES UNTIL RETAIL ACCESS ADOPTED
THE DISTRIBUTION CHARGE

INCENTIVE, PRICE CAP REGULATION

3 TO 5 YEAR TERM

PRICE

AGREED BASE ESCALATES AT CPI, LESS PERCENTAGE

INCENTIVES/PENALTIES BASED ON CUSTOMER SERVICE, RELIABILITY
THE TRANSMISSION CHARGE

DEVELOPMENT SIMILAR TO DISTRIBUTION CHARGE

INCLUDES COMPONENT TO REFLECT TRANSMISSION VALUE OF GENERATION

MAY MERGE WITH DISTRIBUTION CHARGE ON CUSTOMER BILLS
TRANSMISSION VALUE OF GENERATION

GENERATION LOCATED IN SOME AREAS MUST CONTINUE TO RUN TO SUPPORT LOCAL SYSTEM RELIABILITY

THE ABSENCE OF SUCH GENERATORS WOULD REQUIRE TRANSMISSION INVESTMENT BY T&D COMPANIES TO MAINTAIN RELIABILITY LEVELS

ABOVE MARKET ENERGY PAYMENTS (UP TO THE COST OF AN EFFECTIVE TRANSMISSION ALTERNATIVE) MAY BE A LEAST COST OPTION FOR A T&D COMPANY

T&D RATES SHOULD REFLECT ANY SUCH REQUIRED PAYMENTS
THE ACCESS CHARGE
REGULATORY ASSETS
FAS 106
DEFERRED REFINANCING COSTS
10 YEAR RECOVERY PERIOD
ABOVE MARKET NUG OBLIGATIONS
MARKET PRICE TRUE UP MECHANISM
THE ACCESS CHARGE (cont.)

DECOMMISSIONING

INCLUDES COSTS INDEPENDENT OF PLANT OPERATION

RECOVERY PERIOD TRACKS COSTS

UTILITY GENERATION COSTS

INCLUDES ALL SUNK COMMITMENTS

10 YEAR RECOVERY PERIOD
THE ENERGY CHARGE

PRIMARY GOAL:

SET ENERGY PRICE EQUAL TO HOURLY MARKET PRICE

PROBLEMS:

NO CONSENSUS MARKET PRICE EXISTS

MARKET MODELS NOT CONCLUSIVE

TODAY'S MARKET PRICES NOT "REAL"
THE ENERGY CHARGE SOLUTION:

STEP ONE: DEVELOP A PRELIMINARY ESTIMATE OF HOURLY SHORT RUN MARGINAL COST (SRMC) AS A STARTING POINT

NEED MARKET MODEL

PROSYM PRODUCTION COST MODEL SELECTED

DEVELOPS HOURLY SRMC FOR NEW ENGLAND, BASED ON SYSTEM LAMBDA, START UP AND NO LOAD COSTS
THE ENERGY CHARGE SOLUTION (cont.):

RESULTING COSTS NOT A FAIR PROXY FOR PRICES IN A RESTRUCTURED MARKET BECAUSE OF FAILURE TO REFLECT:

CURRENT INCLUSION OF O&M IN BASE RATES

COSTS INDEPENDENT OF OPERATION

TRANSMISSION SUPPORT
THE ENERGY CHARGE SOLUTION (cont.):

STEP TWO: IDENTIFY REQUIRED ADDER TO PRELIMINARY SRMC ESTIMATE:

AGREED UPON COST FORECAST:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>T &amp; D</td>
<td>4 CENTS</td>
</tr>
<tr>
<td>GENERATION</td>
<td>7 CENTS</td>
</tr>
<tr>
<td>TOTAL</td>
<td>11 CENTS</td>
</tr>
</tbody>
</table>

FORECAST REVENUES:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>T &amp; D</td>
<td>4 CENTS</td>
</tr>
<tr>
<td>ACCESS</td>
<td>3 CENTS</td>
</tr>
<tr>
<td>PRELIMINARY SRMC</td>
<td>3 CENTS</td>
</tr>
<tr>
<td>TOTAL</td>
<td>10 CENTS</td>
</tr>
</tbody>
</table>

REQUIRED ADDER 1 CENT
THE ENERGY CHARGE SOLUTION (cont.):

STEP THREE: SPREAD ADDER EQUALLY AMONG ENERGY CHARGE, ACCESS CHARGE AND TRANSMISSION CHARGE

DIFFERENT COMPONENTS OF ADDER SUGGEST DIFFERENT TREATMENT:

E.G., IMPACT OF CURRENT BASE RATE RECOVERY OF ALL GENERATION O&M: REFLECT IN ENERGY CHARGE

E.G., COSTS INDEPENDENT OF OPERATION: REFLECT IN ACCESS CHARGE

E.G., TRANSMISSION SUPPORT: REFLECT IN TRANSMISSION CHARGE
E-PLAN ENERGY PRICE FOR
SAMPLE DAY

ADDER ALLOCATED TO ENERGY PRICE BASED
ON LOSS OF LOAD PROBABILITY (LOLP)
IMPLEMENTATION ISSUES

DAY AHEAD ENERGY PRICE CALCULATION

METERING
INSTALLED BASE TODAY - 2,500
REAL TIME INFRASTRUCTURE NEEDED
NEW METERS AND INSTALLATION

CUSTOMER EDUCATION
NEW MARKET
OPERATIONAL CHANGES

BILLING, SERVICE AND SUPPORT STRUCTURE

E-PLAN PILOT STARTING IN FEBRUARY
E-PLAN PILOT

DURATION
FEBRUARY, 1996 TO FEBRUARY, 1997

PARTICIPANTS
5 TO 10 CUSTOMERS
30 MW LOAD IN TOTAL

PRICING
HOURLY ENERGY PRICE USING MARKET MODEL
SET AT 3 PM THE DAY BEFORE
REVENUE NEUTRAL RATE DESIGN

POSITIVE CUSTOMER REACTION TO DATE
RESULTING E-PLAN RATE LEVELS

T&D CHARGE FIXED, SUBJECT TO PBR

ACCESS CHARGE FIXED, SUBJECT TO NUG TRUE UP

ENERGY CHARGE VARIABLE WITH REGIONAL GENERATION MIX, LOAD, FUEL COST

UTILITY HAS PERFORMANCE RISK PLANT OPERATION, FUEL COSTS ABOVE MARKET, O&M COST

CUSTOMER HAS MARKET PRICE RISK
SUMMARY OF E-PLAN RESULTS

RATES POSITIONED FOR COMPETITION

ACCESS CHARGE IN PLACE

HOURLY ENERGY PRICE VARIES WITH THE REGIONAL MARKET

CUSTOMER PRICING RESPONSE POSSIBLE
SUMMARY OF E-PLAN RESULTS (cont.)

T & D PERFORMANCE BASED

FUEL CLAUSE ELIMINATED

GENERATION PRICE PERFORMANCE BASED:

FUEL RECOVERY LIMITED TO MARKET

UTILITY BEARS UNIT PERFORMANCE RISK

SMOOTH TRANSITION FROM CURRENT RATES