Overview

- Policies under traditional regulation (1970 - 1999)
  - Early PSC activities re: clean energy
  - PURPA/NECPA era
  - Key policy decisions re: clean energy

- Emergence of competitive retail markets

- Restructuring era in DC (1999 →)
  - Restructured electricity & gas markets
  - Clean energy legislation & policies

- Postscript: Leadership roles of PSC commissioners & staff
Early PSC activities re: environment & energy conservation (1970→)

- Seasonal electric rate differential (FC 541; 1970)
- Pepco to report environmental program expenditures (FC 568; 1972)
  - Rejected flattening of residential declining-block rate: “not convinced demand is price elastic”
- Inverted block added to residential rate
  - Low-usage residential customers spared rate increases (FC 596; 1973)
Early PSC activities re: environment & energy conservation (cont’d)

- Energy conservation “national goal” (FC 630; 1975)
  - Endorsed flattening of promotional rate designs;
  - Discounted “all-electric” rate to be phased out, but ruling reversed the following year (FC 651)
    - Reduced rate for all-elec. customers persists to this day

- Early intervenors:
  - Sierra Club/SHOCK
  - DC Power
  - Washington Urban League
  - DC Federation of Civic Assns.
  - DC City-wide Consumer Council
PURPA*/NECPA** era (1978-1990)

- Pepco pricing based on marginal cost
  - Adoption of TOD rates for large comm’l (FC 680; 1979)
- PSC Office of Economics created (1980)
- Federally-req’d Residential Conservation Service (RCS) program adopted for Pepco, WGL (FC 743; 1982)
- Mandatory TOD rates for ~800 largest residential electric customers (FC 759; 1983)

* Public Utility Regulatory Policies Act of 1978
** National Energy Conservation Policies Act of 1978
PURPA/NECPA era (1978-1990) (cont’d)

- Cogeneration & small power producers eligible to receive full avoided cost (FC 757; 1983)

- "Kilowatchers" residential load control program approved (FC 869; 1989)

- WGL directed to file marginal cost study (FC 890; 1990)
Key DC PSC policy decisions re: clean energy (1988-90)

- 1988 ruling established PSC policy re: IRP*, DSM** & DG*** (FC 834-II; 1988)
  - >12 national experts (e.g. Lovins, Cavanagh, Wellinghoff); 133-page order
  - Adopt IRP process for Pepco, WGL, via working groups; plans due every other year
  - Require customer audits & pilot programs for energy efficiency & load management

more....

* least-cost integrated resource planning
** demand-side management
*** distributed generation
continued....

- Energy efficiency (EE) targets for commercial buildings, lighting; gas boilers/furnaces
- Explore residential load control & customer financing for EE measures
- Unsuccessful Residential Conservation Service replaced with “alternative state plan”
- Policies adopted re: alternative energy & cogeneration/small power production
Rate case ruling re: importance of energy efficiency  (FC 889; 1990)

- Pepco denied recovery of energy conservation expense due to non-compliance
- Pepco’s ROE reduced by 15 basis points for lack of commitment to energy conservation
II. Emergence of competitive retail markets

- Federal action to deregulate wholesale gas markets (1980s)
  - Enabled states’ retail customer choice for gas

- PSC rulings re: retail competition for natural gas in gas tariff (GT) cases
  - WGL permitted to deliver other suppliers’ gas
    - Dual-fuel interruptible customers only (FC 849; 1987)
    - Supplier choice for large commercial customers (GT96-2; 1998)
    - Supplier choice for residential customers (GT96-3; 1998-99)
    - Supplier choice for small commercial customers (GT97-3; 1999 - 2002)
Emergence of competitive retail markets (cont’d)

- Signs of competition emerge in electricity markets (1994 →)
  - Federal actions spur divestiture of utility generation
    - Demise of vertically-integrated utilities
  - CA, other states adopt retail competition
  - Public policy goals at risk
Competitive retail markets (more....)

- Settlement terminates IRP obligations for WGL, incl DSM programs (FC 921; 1998)
  - Last IRP plan filed by Pepco in 1998 (FC 917)
    - Specter of restructuring legislation put IRP, DSM on hold
  - Settlement approved re: prudence of Pepco’s 1995-1999 DSM expenditures (FC 945; 1999)

- Reorganization of PJM Interconnection
  - Creation of robust electricity markets
  - Market-based dispatch r/t marginal cost
III. Restructuring era in DC (1999 - present)

- Electricity Competition Act of 1999
  - Electricity restructuring underway in neighboring states
  - Authorized divestiture of most Pepco generation
  - Provided for retail electricity competition, with Pepco as default service provider; 4-year cap on rates
  - Unbundled Pepco distribution rates (regulated) from competitive generation & transmission rates *(FC 945; 2001)*
continued....

- As a “wires-only” utility, Pepco excused from existing IRP and DSM/EUM* requirements
  - Settlement deregulated Pepco’s EUM programs as of 1/1/2001 (FC 945; 2000)

- Created Reliable Energy Trust Fund (RETF) to support energy efficiency and renewables programs via non-bypassable surcharge
  - Programs managed by DC Energy Office, overseen by PSC

- Required fuel mix & (later) emissions disclosure by retail electricity providers

* energy use management
Developments since electricity restructuring in DC

- Natural Gas Act (enacted 2005)
  - Natural Gas Trust Fund (NGTF) supports efficiency & low-income programs re: natural gas

- Renewables Portfolio Std (RPS) (2005)
  - % of renewable content req’d for all retail electricity sales; ramps up through 2022 [2020]
    - Minimum solar component
  - Facilitated by tradeable RECs* f/ PJM & adjacent states; safety valve to control cost
  - Implementation by PSC

more...  

* renewable energy credits
Developments since restructuring (cont’d)

- PSC renewables policies
  - Net energy metering (FC 945; 2005-10)
  - Small generator interconnections (FC 1050; 2006-09)

- Clean & Affordable Energy Act (2008)
  - Sustainable Energy Utility (SEU) created
    - SETF superseded RETF & NGTF
    - PSC’s oversight role over ratepayer-funded energy programs eliminated
  - Stricter, accelerated RPS requirements

- Distributed Generation Act (2011)
  - RPS’s solar component must be sourced from DC
“Revenue decoupling” addresses incentives for energy efficiency

☐ Traditional ratemaking provides incentive for “throughput”

☐ Pepco’s “bill stabilization adjustment” approved (FC 1053-II; 2009)
  - Earlier Pepco decoupling mechanism had been rejected in 1994, along w/ proposed DSM surcharge (FC 929)

☐ WGL’s “revenue normalization adjustment” rejected (FC 1079; 2010)
Power supply & reliability issues

- Environmental concerns spark local opposition to power plants
  - Mirant threatened imminent shutdown of Potomac River plant (PRGS) in VA (August 2005)
    - Pepco & PJM cited threats to local reliability
    - PSC obtained US DOE order to continue operation of PRGS through 2007
  - PRGS in VA retired voluntarily in October 2012, following Pepco transmission upgrades
  - Benning & Buzzard peaking plants in DC retired June 2012, following Pepco transmission upgrades
    - District now ~100% dependent on imported power
DC is national leader re: smart grid

- SMPPI* plans smart metering pilot (2004)
  - Project jointly managed by PSC, OPC, Pepco, DC CUB, IBEW Local 1900 (FC 1002; 2002)
  - PowerCentsDC™ pilot demonstrates broad customer response to dynamic pricing (2008-09)
  - DC’s pilot earns national recognition

- PSC exploration of advanced metering (FC 1056; 2007→)

- PSC exploration of dynamic pricing (FC 1083; 2011→)

* Smart Meter Pilot Program, Inc.
DC is national leader re: smart grid (cont’d)

- PSC approval of Pepco’s direct load control program “Energy Wise Rewards” (FC 1086; 2011)
- 2009 Council action facilitated Pepco’s city-wide rollout of advanced meters
  - *DC has nation’s highest penetration of AMI*
  - PSC investigating AMI issues, incl data privacy, health & safety, feasibility of opt-outs (FC 1056; 2013)

* automated metering infrastructure
Postscript: Leadership roles of DC PSC commissioners & staff

- Leadership roles at nat’l & regional levels
  - NARUC
  - MACRUC
  - MADRI
  - OPSI
  - NEEP
  - NRRI

- Published works on clean energy
  - Cmr Ed Meyers & Grace Hu; Rick Morgan
Thank you!