

The Clean Energy Transition

REGULATION AND INVESTOR-OWNED
ELECTRIC UTILITIES

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Regulation and Investor-Owned Electric Utilities

The Public Regulation Commission is established by the New Mexico Constitution with responsibility for regulating public utilities as provided by law.

New Mexico has three investor-owned utilities (IOUs) providing electricity. They are **regulated, for-profit, monopolies**.

PNM

SPS

EPE



The “regulatory compact”

- The utility is granted a monopoly over a designated service territory and is exempt from competition
- The utility accepts regulatory oversight and an obligation to provide electric service throughout its designated territory

Why does New Mexico have this regulatory structure? Is it working for us?

Some History

Electricity is generally considered important for the “public good”.

- Access to electricity = civilized
- Lack of access to electricity = primitive

A century ago, electricity was available in cities, but most rural areas were without electricity.

With the objective to “electrify” the country, some key decisions were made:

- Access to capital was the most important consideration for this infrastructure intensive initiative
- It is expensive and inefficient to have competing suppliers of electricity in the same territory, therefore suppliers of electricity should be monopolies with a guaranteed service territory and no competition
- Government regulation would substitute for the “free market” to assure that electric monopolies wouldn’t exploit their captive customer base

How does a regulated for-profit monopoly corporation make a profit?

The Revenue Requirement

The Public Regulation Commission is charged with ensuring fair and reasonable rates, and to assure reasonable and adequate services to the public.

The utility is entitled to recover in rates:

- The costs incurred to provide electric service
- The cost of taxes
- Depreciation expense
- A rate of return on the value of its non-depreciated assets

Taken together this is the “Revenue Requirement” which the utility is entitled to recover in rates.

- **$RR = costs + taxes + depreciation\ expense + (r * value\ of\ non-depreciated\ assets)$**
- Where “RR” is the Revenue Requirement and “r” is the authorized rate of return



How to Make a Profit

Free Market	Regulated Monopoly
Compete for customers through better product, price, service, reliability	Create expensive assets with long depreciation horizons
Manage costs to increase margin	Inflate the cost of capital used for investments
Make investments to maintain and grow the business through reduced costs, better product, etc.	Ensure that laws and regulations continue to protect the monopoly

In a market-driven environment, a regulated for-profit monopoly utility is a unicorn.

How do you hold a unicorn accountable?
How do you protect ratepayers from exploitation?



How Does it Work?

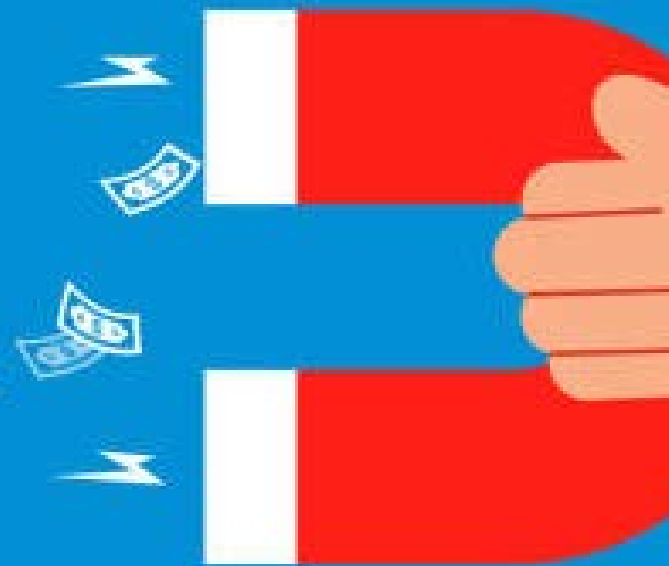
- 1 Legislature makes laws with the motivation to do the right thing for New Mexico
- 2 PRC makes rules to enforce the law within the parameters set by the legislature
- 3 Utility conducts business with the objective of making money and maintaining the monopoly
- 4 Ratepayers pay for everything

Does the PRC have the tools and resources to protect ratepayers?

Ratepayer



Utility



The Clean Energy Transition

Climate Change means:

- Clean up electricity generation
- Electrify everything
- Replace the revenue stream from fossil fuels

2019 amendments to the Renewable Energy Act, which were contained within the omnibus bill that was the Energy Transition Act, extended renewable portfolio standards (RPS) requiring the IOU electric utilities to provide increasing percentages of renewable energy.

This is phrased in statute as “the public utility shall meet the renewable portfolio standard requirements,” and “no later than January 1, 20xx, renewable energy shall comprise no less than X% of each public utility’s total retail sales of electricity to New Mexico customers.”

- In 2023, the requirement is no less than 20%
- In 2025, the requirement is no less than 40%

Statute also creates “renewable energy certificates”, or RECs, to be “used by a public utility to establish compliance with the renewable portfolio standard.”

How are we doing in this energy transition?

The Good News

Current forecasts based on renewable energy as a percent of retail sales

Utility	Forecast	Plan
PNM	2023 = 34.3% 2024 = 32.7% 2025 = 42.6%	PNM is forecasting to bring on new renewable energy in 2025. If they are unsuccessful, they plan to use “banked” RECs for compliance.
SPS	2023 = 34% 2024 = 32% 2025 = 28%	SPS is not forecasting any new renewable resources for several years. They are planning to use “banked” RECs for compliance purposes beginning in 2025.
EPE	2023 = 16.9% 2024 = 24.4% 2025 = 43.7%	EPE hasn’t satisfied the RPS since 2014 and they have no “banked” RECs. Their forecast depends on a new renewable energy resource in 2024 and another new resource in 2025, neither of which currently have a high probability of happening in time.

Does the use of banked RECs achieve the purposes of the Renewable Energy Act?
What should happen when a utility fails to satisfy the statutorily mandated RPS requirement?

Consumption

Retail sales includes only:

- Customer consumption billed by the utility

Retail sales *do not* include:

- Electricity generated and consumed on site
- Household rooftop solar
- Other types of generators that consume some portion of the electricity generated on site
- Off-system sales





Generation

The service territory total generation is not measured or counted.

- Wind farms that provide renewable energy to California are not counted
- Most roof-top solar is not counted unless the utility “purchases” the energy
- Independent power producers that sell to entities other than the IOUs are not counted

The utility’s total generation is not in the calculation.

- The utility can increase its amount of renewable energy without reducing the amount of non-renewable energy it produces



All renewable energy generated is a source of renewable energy certificates (RECs)

Not all RECs can be used to demonstrate compliance with the RPS

Not all RECs are available to the utility

We Have Good Intentions, but...

We are not measuring what we think we are measuring

We know we must clean up electricity **generation**, but we are focused on **consumption**

“Electrify everything” makes it harder to achieve the RPS because when the denominator grows it requires a greater amount of renewable energy

“Electrify everything” defies conventional wisdom about energy efficiency and reducing consumption of electricity

The PRC has inadequate tools to substitute for the checks and balances inherent in the free market

We haven’t found the will to tax electrons to replace the revenue stream from fossil fuels

The Good News



New Mexico has extensive renewable energy resources



Renewable technology continues to develop and improve



The cost for renewables is low and will go lower



The cost for energy storage is low and will go lower



New Mexico already has invested more than enough in gas generation with capability beyond 2045. No new gas generation is needed.



Critical Questions

Why does New Mexico have this regulatory structure? Is it working for us?

How does a regulated for-profit monopoly corporation make a profit?

How do you hold a unicorn accountable?

How do you protect ratepayers from exploitation?

Does the PRC have the tools and resources to protect ratepayers?

How are we doing in this energy transition?

Does the use of banked RECs achieve the purposes of the Renewable Energy Act?

What should happen when a utility fails to satisfy the statutorily mandated RPS requirement?