

Consumers Energy

Consumers Energy Company's Compilation of PBR Comments

Section	Summary of Comments
Added Section	<p>Why Study Performance Based Regulation (PBR)?</p> <ol style="list-style-type: none"> a) 2016 PA 341 mandate b) Overview of MI regulatory construct <ol style="list-style-type: none"> i) Industry environment scan ii) Power markets iii) Technology iv) Customer preferences and expectations v) Investor expectations <p>Adding a high-level overview of the provide context on why this is important and why we are taking the time to study this and provide context by reviewing the current state.</p>
Added Section	<p>Outcomes – Universal Stakeholder Consensus</p> <ol style="list-style-type: none"> a) Provider accountability b) Environmental stewardship c) Resource diversity d) Competitive rates to attract and retain investment and jobs e) Bill affordability for residential and small business customers f) Innovation to drive productivity and reduce operating costs g) Improved customer experience h) Administrative efficiency and reduced cost of regulation <p>Also, make sure to highlight the areas in which are generally agreed upon, listed above, which will help provide a basis for what we would like to be incented by any changes made, if needed.</p>
2. Introduction to performance based regulation	<p>Consider the target audience: present and future state legislators, administration, commissioners and regulatory staff. Rewrite using concepts easily understood by policymakers with no prior exposure to the topic.</p> <p>a. Economic Theory</p> <p>Some considerations to include: what is different today and why we should consider evolving regulatory structure to meet evolving technology, industry dynamics and customer desires:</p> <ul style="list-style-type: none"> • Rapidly evolving technology (more digital, more connectedness) • Flat load growth • Falling prices of solar, wind, storage • Impact of electric vehicles • Distributed vs. central station, more intelligence on the grid • Changing customer experience <p>a.iv. X-efficiency</p> <p>X-efficiency may be the wrong thing to focus on. It could result in utilities optimizing on the wrong things and missing the big picture. Again this seems very granular and we should remember target audience on this, could be added to the appendix.</p>

	<p>a.vi. Cost-of-Service based regulation</p> <p>This section doesn't seem to align with the goal of the report. However, if this section is included, it should start with the basics and then present the challenges with this model and the current state:</p> <ol style="list-style-type: none"> 1. Determining appropriate revenue requirements 2. Determining appropriate rates and tariffs. 3. Historical utility performance under COS construct. 4. Current challenges under COS construct.
<p>3. Performance based regulation essentials</p>	<p>There seems to be a disconnect between sections 2 and 3; it is missing a section describing the desired outcomes/challenges with the existing regulatory structure. The current structure seems to imply PBR has been predetermined to be the right move.</p> <p>The following points should be subsumed in the subsections of section 3:</p> <ol style="list-style-type: none"> a. Development of Performance Targets and Principles b. Development of Rewards and Penalties c. Development of metric performance tracking mechanisms and recovery proceedings d. Consideration of future regulatory constructs (can lay the foundation for future changes to the model without going through an arduous process) <p>This section should also highlight that simplicity is a really important PBR best practice. Complexity is difficult for the regulator, utility and stakeholders to manage and creates a lot of waste in pursuit of perfect efficiency.</p> <p>d.i. Why performance based regulation may lead to compromised service quality or reliability</p> <p>This section already seems to be a conclusion. It can potentially be deleted and any concerns can be addressed in section 3.d.ii.</p> <p>e. Performance based regulation may result in increased regulatory risk</p> <p>This section can be reworded to "Performance based regulation and regulatory risks".</p> <p>e.ii. Multi-year rate-setting period</p> <p>This section can be reworded to "Potential mitigations against over/under earning".</p> <p>f.i. Passing X-efficiency gains to ratepayers at the reset</p> <p>This section can be reworded to "Potential customer sharing of efficiency gains mechanisms".</p>
<p>4. Evolution of incentive ratemaking mechanisms</p>	<p>Section 4 seems more appropriate in section 3.</p>
<p>5. The UK's RPI – X mechanism</p>	<p>Sections 5, 6, 7, and 8 could potentially be grouped under another section titled "Other Alternative Regulatory Constructs".</p>

<p>8. Addition of PIM’s as an alternative to full replacement of COS regulation with PBR</p>	<p>d. Standards setting with penalties as an alternative approach There should be a more balanced view that describes the “carrot”, hitting upon benefit sharing. The mindset shouldn’t be to strive to squeeze as much profit out of utilities as possible. Section should be renamed “Standards setting with penalties and rewards as an alternative approach”</p>
<p>9. Survey of Key Incentive / PBR mechanisms and associated implementation details in the US</p>	<p>This section is better suited for the Alternative Regulatory Constructs section. It should also consider domestic examples like Florida and Georgia as well as international examples</p>
<p>10. Major issues facing future regulators in the rate setting process</p>	<p>This section is better suited for section 2.vi.</p>
<p>11. Conclusions regarding potential applicability of performance based regulation in Michigan</p>	<p>This section should start with a subsection describing the applicability of PBR in Michigan. (e.g. Specific performance based metrics can be developed to meet stakeholder objectives).</p>
<p>12. Best direction for future work</p>	<p>This section can be retitled to either "Recommendations" or "Conclusions".</p> <p>a. Develop a comprehensive system of PIM’s to layer over existing cost-of-service regulation The word "optimization" can be added to the description of subsection a. This will facilitate discussion of ways to develop incentives to optimize the system through investments and/or operational and business model changes. (e.g. Develop a comprehensive system of performance incentive mechanisms (PIM's) and optimization incentives to layer over existing cost-of-service regulation).</p>

DTE Energy

Michigan Public Service Commission
Study of Performance Based Regulation
Per PA 341 of 2016, Sec. 6u

Report outline (**Draft 3.2**)

1. Executive summary/abstract

2. **Introduction to performance based regulation****Historic and Economic Context of PBR – Cost Control**

~~a.~~ **Economic theory**

~~i.a.~~ **Information asymmetry**

~~ii.b.~~ **Firm “participation constraint”**

1. Successful participation in capital and finance markets

~~iii.c.~~ **Strategic behavior**

~~iv.d.~~ **X- efficiency**

~~v.e.~~ **Allocative efficiency**

~~vi.f.~~ **Cost-of-Service based regulation**

~~1.2.~~ **Managerial moral hazard regarding X-efficiency**

~~2.3.~~ **High allocative efficiency**

~~3.4.~~ **The *Used and Useful* standard in theory and ~~in~~ practice**

~~4.5.~~ **Strategic goal of investor owned utilities (IOU’s) – grow rate base**

~~5.6.~~ **Capital investment versus operating expense – imbalanced incentives**

~~vii.g.~~ **Pure rate-cap regulation**

~~1.7.~~ **Highest powered incentives toward X-efficiency**

~~2.8.~~ **Adverse selection & economic rents**

~~viii.h.~~ **Balancing X-efficiency with allocative efficiency**

9. **Ex ante determination of allowed revenues – but responsive to realized costs**

3. **Michigan Utility and Regulatory Goals – Major Energy Related Issues Facing Michigan**

a. Strategic Alignment

i. Need for investment in infrastructure

ii. Improvements in reliability

b. Rate Administration

i. Streamlining of rate case process

ii. Rate smoothing for customers and rate certainty

c. Risk Mitigation

i. Maintain strong and healthy utilities

ii. Balances risk and reward

iii. Minimizes regulatory uncertainty

1.d. Other

4. Definition, Scope and Evolution of PBR – General overview of PBR
see pages 2-7 of Brattle report

a. Types of Performance based regulation essentials

i. Multi-year Mechanisms

1. Multi-year rate cases constitute performance based ratemaking

a. Fully projected multi-year COS rate case

i. Impact on X-efficiency and allocative efficiency

ii. Multi-year rate freeze in contrast

2. Multi-year performance periods and revenue/rate reset

a. Passing X-efficiency gains to ratepayers at the reset

ii. Profit sharing *as cost reduction incentive*

iii. Sliding scale menu of profit sharing “contracts”

a. Self-revealing of cost ‘type’

b. High incentive/low cost type; low incentive/high cost type

c. Mitigation of strategic behavior

iv. Targeted Performance Incentive Mechanisms – TPIs

are to address specific regulatory goals-Performance based regulation contrasted with specific performance mechanisms

a. What is a PIM

i. Earnings adjustment mechanism

b. Cost of service regulation with added PIM’s is the dominant regulatory trend in the United States

c. Structure

i. Guiding goals

ii. Directional incentives

iii. Operational Incentives

iv. Metrics

d. Standards setting with penalties as an alternative approach

e. Public reporting obligations as a transition to full PIM with incentive associated metrics

f. Innovation and market transformation through PIM’s

i. Promoting distributed energy resources

1. Timely interconnection approvals

2. DER growth targets

ii. Promoting system efficiency – peak reduction/load factor improvement

1. CHP

2. Electric vehicles adoption and smart/connected charging
3. Advanced energy storage
4. Geothermal heat pumps
5. Dynamic pricing
6. Other innovative load-control programs

Performance based regulation contrasted with specific performance mechanisms

Service quality and reliability incentive/penalty mechanisms

Why performance based regulation may lead to compromised service quality or reliability

g. Incentive/penalty mechanisms for service quality and reliability **Trends in Performance Incentive Mechanisms**

h. Traditional Measures: Service quality and reliability incentive/penalty mechanisms

- i. Why performance based regulation may lead to compromised service quality or reliability
- ii. Incentive/penalty mechanisms for service quality and reliability

i. New and Evolving Measures

i. Tend to be asymmetrical upward (i.e. reward only)

ii. E.g. New York's Earnings Adjustment

l. Addition of performance incentive mechanisms (PIM's) as an alternative to full replacement of COS regulation with performance based regulation

v. Differentiation of cost reduction and investment incentive mechanisms

1. Addressing incentives to invest in utility infrastructure

a. Such incentives may not be included in MRPs and PIMs

b. Options to introduce incentives for utilities to invest in infrastructure to improve reliability or provide access to the grid

c. Risk reduction as a type of incentive

d. Capex riders

5. Performance based regulation may result in increased regulatory risk

a. Exogenous cost factors (e.g. general inflation indexes)

i. Benchmarking using regression analysis of multi-utility cost data

b. Multi-year rate-setting period

i. Sales trackers may reduce risk of revenue shortfalls/excesses from multi-year projections

Multi-year performance periods and revenue/rate reset

Passing X efficiency gains to ratepayers at the reset

6. Evolution of incentive ratemaking mechanisms

a. Price caps (price control mechanism)

b. Revenue caps (revenue control mechanism)

c. Performance based regulation defined as the combination of *ex ante* determination of allowed revenues and a method to responsive to realized costs]

i. profit sharing

ii. sliding scale menu of "contracts"

d. PBR and utility investment

7. Survey of Key Incentive/PBR Mechanisms

1. Performance based regulation essentials

b.a. Profit sharing

c.a. Sliding scale menu of profit sharing "contracts"

i. Self-revealing of cost 'type'

ii.i. High incentive/low cost type; low incentive/high cost type

iii.i. Mitigation of strategic behavior

d.a. Performance based regulation contrasted with specific performance mechanisms

e.a. Service quality and reliability incentive/penalty mechanisms

i. Why performance based regulation may lead to compromised service quality or reliability

ii.i. Incentive/penalty mechanisms for service quality and reliability

f.a. Performance based regulation may result in increased regulatory risk

i. Exogenous cost factors (e.g. general inflation indexes)

1. Benchmarking using regression analysis of multi-utility cost data

ii.i. Multi-year rate-setting period

1. Sales trackers may reduce risk of revenue shortfalls/excesses from multi-year projections

g.a. Multi-year performance periods and revenue/rate reset

i. Passing X efficiency gains to ratepayers at the reset

1. Evolution of incentive ratemaking mechanisms

h.a. Price caps (price control mechanism)

i.a. Revenue caps (revenue control mechanism)

~~j.a. Performance based regulation defined as the combination of ex ante determination of allowed revenues and a method to responsive to realized costs]~~

~~i. profit sharing~~

~~ii. sliding scale menu of "contracts"~~

3.a. The UK's RPI -X mechanism

a.i. Ex Ante revenue cap

b.ii. Evolution of the regulatory structure

4.b. The UK's RIIO mechanism

a.i. TOTEX -efficient total expenditures

i.1. Methods for estimating

ii.2. Statistical (regression) methods for benchmarking

iii.3. Simultaneous estimating procedure or independent estimate for OPEX and CAPEX

iv.4. Engineering methods for forecasting CAPEX

v.5. Issues relating to infrastructure

replacement/maintenance and infrastructure enhancement - BOTEX method as a solution

b.ii. Continued need for traditional ratemaking functions

i.1. Rate of return

ii.2. Depreciation

iii.3. Rate base

iv.4. Auditing

v.5. Staffing levels

vi.6. "Distribution companies" versus vertically integrated utilities

1.a. Production related CAPEX and integrated resource plans

1. Commentary on multi-year rate cases

k. Do multi-year rate cases constitute performance based ratemaking?

i. Fully projected multi-year COS rate case

1. Impact on X-efficiency and allocative efficiency

2. multi-year rate freeze in contrast

3. Addition of performance incentive mechanisms (PIM's) as an alternative to full replacement of COS regulation with performance based regulation

l. What is a PIM

i. Earnings adjustment mechanism

m. Cost of service regulation with added PIM's is the dominant regulatory trend in the United States

n. Structure

i. Guiding goals

ii. Directional incentives

iii. Operational Incentives

~~iv. Metrics~~

~~o. Standards setting with penalties as an alternative approach~~

~~p. Public reporting obligations as a transition to full PIM with incentive associated metrics~~

~~q. Innovation and market transformation through PIM's~~

~~i. Promoting distributed energy resources~~

~~1. Timely interconnection approvals~~

~~2. DER growth targets~~

~~ii. Promoting system efficiency – peak reduction/load factor improvement~~

~~1. CHP~~

~~2. Electric vehicles adoption and smart/connected charging~~

~~3. Advanced energy storage~~

~~4. Geothermal heat pumps~~

~~5. Dynamic pricing~~

~~6. Other innovative load control programs~~

~~7. Survey of Key Incentive/PBR mechanisms and associated implementation details in the United States~~

~~r.c. New York's "Reforming the Energy Vision" (REV) initiative~~

~~s.d. States considering future incentive/PBR mechanisms~~

~~1. Major issues facing future regulators in the rate setting process~~

~~t.e. Evolution of utility networks~~

~~i. Aging system Infrastructure~~

~~ii. Replacement & retirement~~

~~iii. New technologies and innovation – creating strong incentives toward innovation~~

~~2.8. _____~~ Conclusions regarding potential applicability of performance based regulation in Michigan

~~u.a. _____~~ The UK's RIIO regulatory structure is both elegant and aggressive

~~i. Multi-faceted approach to induce efficient expenditures and best practices; a sharp focus on outputs; strong stakeholder engagement; achievement of rapid technological innovation; and support of national energy/policy goals~~

~~v.b. _____~~ RIIO structure difficult and costly to implement

~~i. RIIO was an evolution of a long-standing history of PBR in the UK~~

~~ii. The eight-year revenue setting cycle needed to recover extraordinary administrative cost [30-month case processing schedule]; unlikely to significantly increase capital investment X-efficiency (vis-à-vis RPI -X) for long service life infrastructure~~

~~iii. TOTEX method of benchmarking efficient utility costs presents substantial difficulty in implementation with uncertain effectiveness~~

~~iv. RIIO applied to UK distribution companies avoids complications associated with vertically integrated utilities [no generation, no retail sales functions]~~

9. Best direction for future work

- a. Develop a PBR plan that is integrated and specifically addresses regulatory goals**
- i. May involve “components” that make up the total plan**
 - ii. May require developing multiple types of incentives – cost reduction, improvements in traditional areas of performance, utilities taking actions to meet new goals, incentives for utilities to invest in infrastructure**
- b. PIMs are one component addressing traditional areas of utility performance**

3. _____

- vi.i.** Develop a comprehensive system of performance incentive mechanisms (PIM’s) to layer over existing cost-of-service regulation
 - vii.ii.** Establish stakeholder process for crafting comprehensive and coordinated system of PIM’s
 - viii.iii.** Coordinate PIM development with integrated resource planning (IRP) process
 - ix.iv.** Coordinate PIM development with MPSC “Distribution Planning” process
 - x.v.** Explore possible PIM (consistent with PA 304 of 1980) for X-efficient power supply acquisition [fuel and purchased power]
- c. Consider multi-year rate plans**
- xi.i.** ***Develop a structured process for MPSC review of utility-forecasted operating and capital expenditures in general rate cases***
 - xii.ii.** ***Statistical and engineering methods for determining X-efficient expenditures***
 - iii.** ***Benchmarking and best practices***
- d. Consider incentives to invest/reduce risk**
- i.** ***Cap-ex riders***
 - *.ii.** ***Other mechanisms***

Review and Analysis of Performance Based Regulation Plans

PREPARED FOR



PREPARED BY

William Zarakas

Toby Brown


Léa Grausz

Heidi Bishop

Henna Trewn

DRAFT

JUNE 23, 2017



This report was prepared for DTE Energy. All results and any errors are the responsibility of the authors and do not represent the opinion of The Brattle Group or its clients.

Acknowledgement: We acknowledge the valuable contributions of many individuals to this report and to the underlying analysis, including members of The Brattle Group for peer review.

Copyright © 2017 The Brattle Group, Inc.

Table of Contents

I.	Introduction.....	Error! Bookmark not defined.
A.	PBR in Michigan	Error! Bookmark not defined.
B.	PBR: Definition and Scope	Error! Bookmark not defined.
C.	Risk and Reward	Error! Bookmark not defined.
D.	Report Organization	Error! Bookmark not defined.
II.	Broad-based Incentive Framework	Error! Bookmark not defined.
A.	Incentive to Control Costs.....	Error! Bookmark not defined.
B.	Features of a Broad-based Incentive Framework	Error! Bookmark not defined.
C.	Rate Adjustment Between Rate Cases.....	Error! Bookmark not defined.
D.	Associated Provisions.....	Error! Bookmark not defined.
E.	Price Caps and Revenue Caps.....	Error! Bookmark not defined.
F.	Summary Findings	Error! Bookmark not defined.
III.	Targeted Performance Incentives.....	Error! Bookmark not defined.
A.	Traditional TPIs.....	Error! Bookmark not defined.
1.	Performance Measures	Error! Bookmark not defined.
2.	Performance Targets.....	Error! Bookmark not defined.
3.	Deadbands or Neutral Zones.....	Error! Bookmark not defined.
4.	Incentive Structure	Error! Bookmark not defined.
a.	Symmetry.....	Error! Bookmark not defined.
b.	Incentive Cap and Allocation	Error! Bookmark not defined.
c.	Shape and Slope	Error! Bookmark not defined.
B.	Emerging TPIs.....	Error! Bookmark not defined.
C.	Energy Efficiency TPIs	Error! Bookmark not defined.
D.	Summary Findings	Error! Bookmark not defined.
IV.	Supplemental Incentives.....	Error! Bookmark not defined.
A.	Formula Rates.....	Error! Bookmark not defined.
1.	Illinois Formula Rates.....	Error! Bookmark not defined.
2.	Rate Stabilization and Equalization	Error! Bookmark not defined.
B.	Riders and Trackers.....	Error! Bookmark not defined.
C.	Summary Findings	Error! Bookmark not defined.
V.	Integrated PBR Frameworks.....	Error! Bookmark not defined.
A.	RIIO	Error! Bookmark not defined.
B.	Case Studies	Error! Bookmark not defined.

DRAFT

VI. Authority and Compliance**Error! Bookmark not defined.**

VII. Findings and Conclusions**Error! Bookmark not defined.**

List of Acronyms.....**Error! Bookmark not defined.**

Appendix A: Survey of PBR / Incentive Regulation in the U.S.

- A-1: Survey of Multi-year Rate Plans
- A-2: Survey of US Traditional TPI Plans
- A-3: Summary of Traditional TPI Measures – System Reliability
- A-4: Summary of Traditional TPI Measures – Customer Service and Employee Safety
- A-5: Survey of Energy Efficiency TPIs
- A-6: Survey of U.S. Formula Rate Plans
- A-7: Survey of Utility Riders

Appendix B: Case Studies

- B-1: Pacific Gas & Electric Company (PG&E)
- B-2: Northern States Power d/b/a Xcel Energy
- B-3: Consolidated Edison Company of New York (Con Edison)
- B-4: Florida Power & Light (FPL)
- B-5: Public Service Electric & Gas (PSE&G)
- B-6: Commonwealth Edison (ComEd)
- B-7: ATCO Electric and ATCO Gas, Alberta, Canada
- B-8: Ausgrid, Australia
- B-9: Northern Powergrid (NPg) and Northern Gas Networks (NGN), Great Britain

DRAFT

Performance Based Regulation Bibliography - MPSC 7/24/17

Title	Source	Author	Date	Description
Exploring Performance Based Regulation and Alternative Rate Making	Advanced Energy Economy	Lisa Frantzis	November, 2016	Presentation at National Association of Regulatory Utilities Commissioners (NARUC) event
New Regulatory Models	Utility of the Future Center, America's Power Plan	Sonia Aggerwal, Eddie Burgess	March, 2014	Paper
Lower Spending, Higher Returns: Aligning Performance Incentives to Accelerate a 21st	CLEAResult	Peter Kind, Doug Lewin		Paper
Performance Based Regulation	Electricity Consumers Resource Council	ELCON	August, 2000	Paper: feature of "Profiles on Electricity Issues" series, #22
Performance Based Regulation in a High Distributed Energy Resources Future	Lawrence Berkely National Laboratory	Mark Newton Lowry, Tim Woolf	January, 2016	Paper
Utility of the Future: the Regulatory Response	Camput		2014	NARUC-Camput Presentation
Alterative Regulation for Emerging Utility Challenges: 2015 Update	Edison Electric Institute, prepared by Pacific Economics Group Research	Mark Newton Lowrey, Matthew Makos, Gretchen Waschbusch	November, 2015	Paper
Performance Based Regulation of Utilities	Energy Law Journal	Mark Newton Lowrey, Lawrence Kaufmann	October, 2002	Law Journal Article
Service Quality Regulation for Detroit Edison: A Critical Assessment	Pacific Economics Group	Larry Kaufmann	March, 2007	Paper
Performance Based Regulation for Distribution Utilities	Regulatory Assistance Project		December, 2000	Report for NARUC
Can Performance Based Regulation Unlock the Utility of the Future?	Utility Dive	Herman K. Trabish	March, 2016	Web posted article
The Resurgence of Performance Based Ratemaking	West Monroe		2013	Web posted article

Performance Based Regulation Bibliography - MPSC 7/24/17

Commonwealth Edison Company's Multi-Year Performance Metrics Plan	Illinois Utility Docket		December, 2011	Utility docket filed document
Regulatory Incentives and Disincentives for Utility Investments in Grid Modernization	Lawrence Berkely National Laboratory	Steve Kihm, Janice Beecher, Ronald Lehr	May, 2017	Paper
State Performance Based Regulation Using Multi-Year Rate Plans for U.S. Electric Utilities	Grid Modernization Laboratory Consortium, U.S. Department of Energy	Mark Newton Lowrey, Matthew Makos, J. Deason	July, 2017	Paper
Northern States Power Company Multi-Year Rate Plan	Minnesota Utility Docket	Charles Burdick	November, 2015	Utility docket filed document
Multi-Year Rate Plans and the Public Interest	National Regulatory Research Institute (NRRRI)	Ken Costello	October, 2015	Paper
Innovative Rate-Making: Multi-Year Rate Plans	Scott Madden & Associates		February, 2014	Paper/Presentation
Reforming Electricity Regulation in New York State: Lessons from the United Kingdom	New York University, Guarini Center, Environmental, Energy & Land Use Law	Danielle Spiegel-Feld, Benjamin Mandel	January, 2015	Paper
Emerging Energy Trends: Regulatory Responses to Ontario's Energy Future	Mowat Energy	Paul Sommerville, Richard Carlson, Petar Prazic	December, 2016	Paper
RIIO to REV: What U.S. Power Reform Should Learn from the U.K.	Pace Law Review	Heather Payne	September, 2015	Law review article
Price Controls Explained	Ofgem, U.K Regulators		March, 2013	Fact sheet
Performance Based Regulation for Pennsylvania	Advanced Energy Economy Institute		March, 2017	Paper
Roadmap to Implementing Michigan's New Energy Policy: Paths to the Future Report	Regulatory Assistance Project, Public Sector Consultants		August, 2015	Report for Michigan Energy Office
Review and Analysis of Performance Based Regulation Plans Prepared for DTE Energy	The Brattle Group	William Zarakas etal	August, 2017	Report for DTE Energy

Michigan Electric & Gas Association

8/21/17 – MEGA Comments on Draft Report Outline and Bibliography

Dear Patrick:

Thank you for soliciting input for the outline and bibliography on the MPSC performance-based ratemaking study. The effort so far appears to be very thorough and studious. We appreciated the outreach meeting opportunities. Here are a few general comments, not necessarily reflecting the view of any particular MEGA member, but provided for your information and consideration.

Bibliography – Other Source Material

Peter Navarro, The Simple Analytics of Performance – Based Ratemaking: A Guide for the PBR Regulator, Yale Journal on Regulation, Issue I, Vol 13, Article 3 (1996) (available at digital commons.yale.edu): analysis of PBR in an earlier time when it was under much consideration.

Lesser and Giacchino, Fundamentals of Energy Regulation, 2nd Edition (PUR 2013): Chapter 4 on Alternative Regulatory Structures has a balanced decision of the pros and cons of PBR in section 4.5.

Outline – Suggestions

Part 9 – Include some Michigan history on measures such as O&M Indexing and the System Availability Incentive Provision (what worked/what didn't).

Part 11 – Include a discussion of the legal authority for PBR in Michigan under previous and current statutes. Can you ask the AG – Public Service Division for this? See Attorney General v Public Service Comm, 141 Mich App 505; 367 NW2d 341 (1985) regarding O&M Indexing and SAIP.

Part 11 – Characterizing the UK RIIO structure as “elegant” and “aggressive” would need much explanation regarding the competing points of view. Also, consider discussing Rob Ozar’s point that RIIO was not intended to reduce energy costs but instead was an effort to gain more customer support for measures that increase rates, such as renewable energy standards. In discussing these measures in the U.K., New York and elsewhere, there should be perspective regarding the level of rates in those jurisdictions versus elsewhere.

Part 12 – The “best direction” section outline appears to focus exclusively on adding new regulatory systems and processes. The analysis should also consider the regulatory costs and impact on customers, particularly if process costs are added for smaller utilities. Some consideration should be given to the merits of allowing the new regulatory measures adopted in 2016 by statute to be fully implemented and analyzed from experience before adding more new regulatory requirements.

James A. Ault

President, Michigan Electric and Gas Association

110 West Michigan Avenue, Suite 375

Lansing, MI 48933

(517) 484-7730

jaault@gomega.org