STATE OF MICHIGAN

BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

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In the matter of the application of

CONSUMERS ENERGY COMPANY for authority

to increase its rates for the generation and
distribution of electricity and for other relief.

Case No. U-15645

At the October 7, 2014 meeting of the Michigan Public Service Commission in Lansing, Michigan.

PRESENT: Hon. John D. Quackenbush, Chairman
Hon. Greg R. White, Commissioner
Hon. Sally A. Talberg, Commissioner

ORDER

On November 14, 2008, Consumers Energy Company (Consumers) filed an application in this docket requesting a $215 million rate increase above the retail electric base rates established in previous rate orders. On November 2, 2009, the Commission issued an order (November 2 order) approving, inter alia, advanced metering infrastructure (AMI) capital and operations and maintenance (O&M) expenditures for 2008 and 2009.

After appeals by various parties, the Court of Appeals issued an order affirming in part, reversing in part, and remanding the case for further proceedings. With respect to the Commission’s determinations concerning AMI, the Court found:

In In re Detroit Edison Co Applications, 296 Mich App [101], 114; [817 NW2d 630 (2012)] this Court discussed the PSC’s decision to fund the AMI program, stating that it was a pilot program that had yet to be commercially tested. We also noted that only “aspirational testimony describing the AMI program in optimistic but speculative terms” was provided, and that “[w]hile we appreciate that a cost-benefit analysis for a pilot program may be more difficult to establish with record
evidence, this inherent difficulty does not permit the PSC to authorize millions of dollars in rate increases without an informed assessment supported by competent, material, and substantial evidence.” *Id.* at 115. This Court remanded the case to the PSC for:

a full hearing on the AMI program, during which it shall consider, among other relevant matters, evidence related to the benefits, usefulness, and potential burdens of the AMI, specific information gleaned from pilot phases of the program regarding costs, operations, and customer response and impact, an assessment of similar programs initiated here or in other states, risks associated with AMI, and projected effects on rates. In other words, a real record, with solid evidence, should support whatever decision the PSC makes on remand. [*Id. At 116*]

The instant case is on all fours with *In re Detroit Edison Co Applications*. The PSC defends the AMI program by arguing that “five witnesses . . . testified regarding the Company’s use of the AMI pilot program and how it will be used in conjunction with demand response to affect the capacity necessary to reliably serve firm demand.” Consumer Energy highlights testimony regarding the potential benefits that AMI will provide to customers, such as enhanced customer service and value, cost savings, and increased effectiveness in meeting customer needs.

Yet, just like in *In re Detroit Edison Co Applications*, 296 Mich App at 115, the evidence Consumers Energy and the PSC relies on is “aspirational testimony” concerning expectations for the project. As epitomized in one witness’s explanation, “[t]hese benefits will become available to customers once the supporting systems and communications infrastructure are in place and as smart meters are deployed across our service area.” Thus, as we instructed in *In re Detroit Edison Co Applications*, 296 Mich App at 116, we remand this case to the PSC for full hearing on the AMI program to consider “evidence related to the benefits, usefulness, and potential burdens of the AMI, specific information gleaned from pilot phases of the program regarding costs, operations, and customer response and impact, an assessment of similar programs initiated here or in other states, risks associated with AMI, and projected effects on rates.”

*In re Application of Consumers Energy Co*, unpublished opinion per curiam of the Court of Appeals, issued October 30, 2012 (Docket No. 296625,) slip op. at 10-11.

On October 17, 2013, the Commission issued an order reopening the proceedings “for the limited purpose of responding to the Court of Appeals’ remand.” Order, p. 3.

On November 13, 2013, a prehearing conference was held before Administrative Law Judge Sharon L. Feldman (ALJ). Consumers, the Michigan Department of the Attorney General
(Attorney General), Midland Cogeneration Joint Venture, and the Commission Staff (Staff) participated in the reopened proceedings. An evidentiary hearing was conducted on May 5, 2014. The parties filed briefs and reply briefs, and the ALJ issued her Proposal for Decision (PFD) on August 1, 2014. The Attorney General filed exceptions on August 27, 2014, and Consumers and the Staff filed replies to exceptions on September 19, 2014. The record in this reopened proceeding consists of 324 pages of transcript and 47 exhibits admitted into evidence.

Proposal for Decision

The ALJ provided a detailed review of the record and positions of the parties, on pages 3-29 of the PFD, which will not be repeated here. The ALJ considered the following disputed issues: (1) the scope of the remand from the Court of Appeals; (2) whether the costs of the pilot AMI program should be approved in light of the factors discussed in the remand order; and (3) whether the company’s business case for AMI reasonably projects benefits that exceed the costs for full deployment of AMI.

With respect to the scope of the remand, the ALJ discussed Consumers’ and the Staff’s position that the issue on remand was limited to whether the Commission should approve the AMI revenue requirement for the 2009 test year, designed to recover costs for 2007 through 2009, in contrast to the Attorney General’s claim that the proceeding should address the entire cost of the AMI program as currently designed. After a review of the record in the original rate case, other Commission orders concerning AMI, and the language in the Court’s order, the ALJ found that the remand only concerned the specific pilot costs that were at issue in the November 2009 order. The ALJ noted that the Commission has consistently determined that a step-by-step review of AMI in

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1 An untimely petition to intervene filed by an individual who was not previously a party to this proceeding was denied at the prehearing conference. The denial was affirmed by the Commission on March 6, 2014.

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each succeeding rate case is appropriate. She further observed that this approach has been affirmed by the Court of Appeals subsequent to this remand.

The ALJ also found that the language of the remand order, albeit containing a wide range of factors to be considered, did not in itself define the scope of the remand proceeding. According to the ALJ:

[A]t the end of the day, the question on remand is whether the Commission should include in rates the identified capital and operating expenses for which Consumers Energy requested rate recovery in this docket, not whether the Commission should disapprove any other expenditures for AMI that Consumers Energy did not seek recovery of in its application and that are beyond the 2009 test year.

PFD, pp. 43-44.

The ALJ determined that in the remand, the Court instructed the Commission to consider the benefits, usefulness, potential burdens, and specific information from the pilot phase of Consumers’ AMI deployment. Concerning the benefits of the AMI pilot, the ALJ found that Consumers provided evidence of benefits from both the pilot phase of the AMI program and overall benefits from full deployment of the technology. She rejected the Attorney General’s claim that the testimony by the company’s witnesses was aspirational and his contention that the costs of full AMI deployment exceed the benefits. The ALJ found that, in light of the substantial and unchallenged benefits of AMI, the value of Consumers’ pilot, the purpose of which was to determine the potential benefits of full deployment, was demonstrated on the record.

The ALJ then discussed the usefulness of AMI in the context of “used and useful” utility plant included in rate base. She highlighted Staff testimony regarding the number of meters deployed and their essential function in providing utility service. She noted that the Attorney General did not specifically dispute this testimony.
With regard to potential burdens associated with the pilot program, the ALJ pointed to the small cost ($2.3 million) of the pilot program compared to the company’s overall revenue requirement. With respect to full deployment, the ALJ observed that the Commission did not approve full deployment in the November 2 order and that the guidelines for AMI that the Commission adopted provide significant protections for ratepayers, including a requirement that in the future, Consumers present a detailed benefit-cost analysis that supports full deployment of AMI.

Turning to the specific information gleaned from Consumers’ pilot projects, the ALJ found that the pilot involved testing of various meters, software, and communications systems as well as the implementation of dynamic load management (DLM) and dynamic peak pricing (DPP) pilot programs. According to Consumers, the information derived allowed the company to develop solicitations for meter hardware and software, as well as a data management system. Consumers also validated positive customer response and usage reductions due to DLM and DPP. The ALJ noted that while the Attorney General challenged the extrapolation of savings from the pilot programs to potential savings at full deployment, he did not dispute the information derived from the AMI pilot.

Concerning Consumers’ assessment of similar AMI projects in other jurisdictions, the ALJ noted that as of May 2012, one third of U.S. households had AMI meters installed, and that Michigan’s rate of AMI deployment is in the middle of all states. Consumers stated that it has used the information from other AMI programs to further refine its business case. The ALJ observed that the Attorney General raised an issue with the fact that several of the programs Consumers used for comparison had received grants for AMI from the U.S. Department of Energy (DOE), but that Consumers had not. On the basis of what he contended were weaknesses in
Consumers’ grant application, the Attorney General argued that Consumers should not be approved for full AMI deployment. In response, Consumers provided several comments from the grant reviewers, including a favorable review of the company’s pilot programs. The ALJ found that although Consumers did not receive a DOE grant, the company did receive positive feedback on its approach to piloting AMI, which was the intent of the funding approved in the November 2 order.

The ALJ observed that the Attorney General disputed Consumers’ assessment of the risks associated with full AMI deployment. According to the Attorney General, the company only evaluated risks concerning the performance of the meters and customer acceptance of the technology. According to him, additional risks include changes in benefits’ costs and levels of customer participation in energy management programs. Consumers responded that it has taken a measured approach to AMI deployment, thus allowing the company to respond to risks as they arise. The ALJ agreed that Consumers’ method is consistent with the guidelines established in the November 2 order and the Commission’s general approach to AMI. The ALJ thus determined that the pilot programs approved by the November 2 order help mitigate the risks associated with full AMI deployment.

In summary, based on her review of the evidence in this record, the Court of Appeals’ remand instructions, and the Commission’s order on remand, the ALJ concluded that it was reasonable for the Commission to have approved the pilot AMI expenditures in the November 2 order. She found that Consumers presented substantial evidence of benefits, both quantified and unquantified, and noted that the Court of Appeals had affirmed subsequent funding of AMI approved in Case No. U-16191. See, In re Application of Consumers Energy Co to Increase Rates,
unpublished opinion per curiam of the Court of Appeals issued November 20, 2012 (Docket No. 301318).

The ALJ further observed that although the business case for full deployment of AMI is beyond the scope of this proceeding, because the parties had fully briefed the issue, a review of the disputed issues was appropriate.

As an initial matter, the ALJ reiterated that in subsequent rate proceedings, the Commission has evaluated the company’s case for full deployment of AMI and most recently concluded that Consumers’ evidence justified continued funding of the AMI program, with costs continuing to be evaluated in each rate case. In this case, Consumers projected a net benefit to ratepayers of $53 million as shown in Exhibit A-2. In contrast to the company presentation, the Attorney General took issue with Consumers’ method and several of its estimates. Using his method and revised savings estimates, he projected a negative net present value of $203 million.

With respect to the differing methodological approaches, the ALJ found that Consumers’ approach was appropriate because it “logically relates the increase in revenue requirement that would be caused by AMI full deployment to decreases in the revenue requirement that would result from expected savings. Thus, as Consumers Energy explains, its analysis appropriately incorporates costs and savings from the standpoint of the ratepayer.” PFD, p. 66.

With respect to specific cost savings, the Attorney General contended that Consumers significantly overestimated cost reductions due to theft detection and avoidance, uncollectibles expense, and capacity savings due to DLM and DPP programs enabled by AMI. The ALJ disagreed with the Attorney General’s proposed adjustments. Specifically, she found that

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2 Consumers used a comparison of customer rate impacts to expected savings whereas the Attorney General compared the costs and revenues from the standpoint of the company’s investors.
Consumers provided adequate support for its savings due to theft detection and deterrence, reduced uncollectibles, and peak capacity savings due to DLM and DPP programs. She also found that Consumers’ estimates for conservation and the pre-pay program, enabled by AMI, were reasonable.

In light of the foregoing findings, the ALJ recommended that the Commission determine that Consumers’ benefit-cost model and inputs are reasonable, in the event the Commission finds that the scope of the remand includes an evaluation of the full deployment of AMI.

Exceptions and Replies

The Attorney General raises a general issue with the PFD, claiming that the ALJ set an impermissibly low burden of proof for the company, which is especially problematic in a case where the potential costs are extremely high as is the case with AMI.

The Attorney General takes exception to the ALJ’s finding with respect to the scope of the remand. According to the Attorney General, the Court did define the scope of the remand, and the ALJ’s finding that the remand was limited to the costs at issue in the 2009 rate proceeding is contrary to the language and intent of the Court’s order. The Attorney General contends that, contrary to the ALJ’s determination, the Court directed a full and complete hearing on the benefits and costs of the entire AMI program, not just the pilot program.

The Attorney General pointed to testimony by his witness who stated that Consumers provided little evidence of cost savings or other benefits from AMI programs in other jurisdictions, adding that the purported benefits were derived from estimates by other utilities and not from the company’s actual experience. With respect to risks, the Attorney General noted the limited testimony provided by the company and the lack of expertise by Consumers’ witness explaining the company’s benefit-cost analysis. The Attorney General further argued that Consumers’
assessment of alleged benefits attained by other utilities implementing AMI was limited to a comparison of certain metrics before and after AMI implementation, without any critical analysis of causation. The Attorney General added that many of these utilities received DOE grants that significantly improved the apparent economic viability of the projects. The Attorney General noted that Consumers’ grant application was criticized for unrealistic or overstated benefits of AMI.

The Attorney General takes exception to the ALJ’s determination that Consumers’ benefit-cost analysis method, from the ratepayers’ perspective, was more appropriate than the method and analysis he presented. The Attorney General questioned the rationale for using an approach that no investor or business would use in deciding whether to finance a particular project. The Attorney General also takes issue with the costs included in the company’s analysis, contending that many of the costs associated with AMI were excluded. The Attorney General points out that simply changing the company’s method to one he considers more conventional would change the outcome from a positive net benefit of $53 million to negative $19 million. Adding in the additional costs and adjustments identified by the Attorney General reduces the net benefit further, to negative $203 million.

The Attorney General takes exception to the ALJ’s finding that Consumers’ projected losses associated with energy theft were reasonable. According to the Attorney General, the company’s evidence shows that energy theft is on the decline and as such, the savings Consumers projects are inflated. The Attorney General added that Consumers’ theft reduction assumptions are duplicative for the 2014-2019 period, because the company assumes savings of .50% due to theft detection and a 1% reduction in actual theft at the same time. The Attorney General adds that the company’s estimated 1% in savings due to gas theft reduction is similarly unrealistic. The
Attorney General advocates that the Commission adopt more reasonable percentages for theft detection and elimination of .50% for electric and .75% for gas.

The Attorney General takes exception to the ALJ’s findings concerning a reduction in uncollectibles expense due to AMI. The Attorney General specifically takes issue with the ALJ’s statement that there was nothing in the record, save the skepticism of his witness, to challenge Consumers’ evidence. The Attorney General argues that the ALJ impermissibly shifted the burden of proof from the company to other parties to the proceeding. Additionally, the Attorney General contends that there in fact was sufficient evidence to challenge Consumers’ claimed savings for uncollectibles expense. The Attorney General pointed to his witness’ opinion that that the company’s claimed reduction in shutoff time is suspect, especially in light of the fact that the company is still required to provide advance notice of shut off. In addition, the Attorney General argued that the record shows that the primary factors causing bad debt will not be affected by the implementation of AMI. The Attorney General again observed that Consumers’ data was largely derived from filings by other utilities, without any analysis of the causal connection (if any) between a reduction in uncollectibles amounts and the deployment of AMI.

The Attorney General also took issue with the ALJ’s acceptance of Consumers’ estimates of peak capacity savings due to DLM, DPP, pre-pay programs, and AMI-induced conservation. The Attorney General argued that Consumers’ estimate of peak demand savings was inflated due to its use of overstated system loss ratio and values for avoided capacity. Similarly, the Attorney General contends that Consumers overestimated the number of residential customers who will participate in DPP programs, claiming that Consumers’ estimate that 20% of its customers will avail themselves of DPP is overstated and highly dependent on the incentives and disincentives offered. The Attorney General claims that a 15% participation rate is far more reasonable.
The Attorney General argued that Consumers’ assumption that 77% of its customers who do not participate in DLM or DPP programs are expected to conserve energy due to access to more granular energy usage data is too high and that a 25% participation rate is more reasonable. Likewise, the Attorney General questions the company’s assumptions with respect to participation levels and energy savings in the pre-pay program. The Attorney General points out that although Consumers relies on the Salt River Project to support its assumption that 10% of its customers will participate in the pre-pay program, it took 17 years for the Salt River Project to achieve participation levels of 12%. The Attorney General asserts that it is more reasonable to assume a 5% participation rate with a 3% energy conservation rate.

The Attorney General urges the Commission to find that Consumers failed to provide substantial evidence on the record sufficient to comply with the Court of Appeals remand. The Attorney further recommended that the Commission order Consumers to suspend its AMI program until such time as the company can demonstrate that the benefits of AMI exceed the costs.

In response, Consumers contends that the ALJ properly found that the company met its burden of proof in this proceeding. According to Consumers, the fact that the ALJ disagreed with the Attorney General does not diminish the scope and weight of the company’s evidentiary presentation. Consumers further argues that the ALJ correctly determined that the scope of the remand included only the costs for the AMI pilot that were at issue in the November 2 order. According to Consumers, the Attorney General ignores the procedural history of this case, and other AMI remand cases, in attempting to expand the proceeding to address any issue involving AMI. Consumers points specifically to the October 17, 2013 order in Case No. U-15768, in which the Commission defined the scope of a similar remand as concerning only the issues involved in a pilot AMI program implemented by DTE Electric Company. Consumers adds that this proceeding
cannot and should not address full AMI deployment because the full deployment was not even proposed in the underlying rate case.

Consumers claims that, in accordance with the language in the remand order, it provided substantial and material evidence concerning the benefits, usefulness, and potential burdens of AMI, along with specific information gleaned from the pilot programs and information from other states that have implemented AMI. Consumers takes issue with the Attorney General’s position that the company’s evidence remains aspirational, despite the fact that the company included updated information on actual benefits and costs of AMI.

In response to the Attorney General’s claim that Consumers failed to provide specific analyses of various AMI programs in other jurisdictions, Consumers contends that its evidence included benchmarking of other utilities’ experiences and visits to several sites where AMI implementation is further developed. Consumers points out that the Staff also presented evidence concerning the reasonableness of Consumers’ projections compared to other, more mature AMI programs.

Consumers claims that its benefit cost analysis looks at the net benefits of AMI from the perspective of the customer and that this analytical is consistent with the present value revenue requirement (PVRR) method the Commission approved in the company’s most recent rate case. Consumers argues that the Attorney General ignores the fact that the Commission has repeatedly rejected his approach. Consumers adds that it provided its entire PVRR business case for AMI through 2032 to provide further support for the approval of costs in the November 2 order; however, the issue of full AMI deployment has never been an issue in this proceeding.

With respect to the Attorney General’s claim that Consumers failed to support its projected savings from a reduction in theft, Consumers notes that its evidence was based on industry research and analysis, whereas the Attorney General’s witness provided only his opinion that
Consumers’ projections were overstated. Consumers also points out that the Attorney General’s reliance on a 4.7% system loss ratio is misplaced. The 4.7% the Attorney General used incorporated only one year (when multi-year averages range from 6.9%-8.7%) and it does not reflect losses at the retail level, where losses are much higher. Consumers also argues that its estimate of savings of 0.50% from pre-deployment theft detection, and 1% post-deployment are not duplicative, adding that the theft-detection software associated with AMI is far more sensitive to irregularities than visual inspection by meter readers, contrary to the Attorney General’s contention.

Consumers argues that the Commission should affirm the PFD with respect to savings from reduced uncollectibles and bad debt. According to Consumers, the Attorney General failed to recognize the operational costs (and timing) of manual shut offs compared to the remote shut off capabilities enabled by AMI. Consumers posits that its projections were supported by industry experience and that the Attorney General’s witness relied solely on his personal experience in the gas utility business, without any industry research or study to support his opinions.

Consumers argued that the Attorney General’s exceptions regarding savings due to DLM and DPP programs should be rejected. According to Consumers, its projections of savings from these programs were supported by research performed by the company, industry research, and independent analyses by The Brattle Group. Conversely, Consumers contends that the Attorney General’s evidence contained numerous errors and erroneous assumptions. Similarly, Consumers contended that the Commission should reject the Attorney General’s exception to the PFD concerning AMI-induced conservation, noting the Attorney General’s repeated error in calculating customer participation in the AMI web portal.
In its reply to the Attorney General’s exceptions, the Staff points out that while it is true that
the company bears the initial burden of proof to justify its case, the burden then shifts to the
Attorney General to challenge or refute the company’s evidence, which he failed to do. The Staff
further agrees with the ALJ and the company that the proper scope of the remand in this
proceeding is the costs of the pilot AMI program that were discussed and decided in the
November 2 order. The Staff notes that the Court’s subsequent decision affirming cost recovery
for AMI approved in a subsequent rate case is further evidence that each rate case is evaluated on
its own merits and the only costs at issue are those discussed in the November 2 order.

The Staff asserts that, despite the Attorney General’s claims to the contrary, Consumers and
the Staff submitted all of the information required by the remand order, including risks, benefits,
usefulness, potential burdens, projected effects on rates, an assessment of other AMI programs,
and specific information from the company’s pilot programs. The Staff contends that sufficient
evidence was provided on each of these topics to support the ALJ’s findings and conclusions.

The Staff argues that the Commission is not required to use any particular benefit cost analysis
in evaluating Consumers’ AMI program, noting that many of the benefits of AMI cannot be
quantified. The Staff further observed that the Commission rejected the same benefit cost method
the Attorney General advocates in this proceeding in the June 28, 2013 order in Case No.
U-17087. For the same reasons discussed in that order, the Staff contends the Commission should
again reject the Attorney General’s actual cash flow method.

The Staff argues that the ALJ appropriately found Consumers’ witnesses and testimony more
credible on the issues of savings from energy theft and theft deterrence, reduced uncollectibles,
and reductions in peak capacity. The Staff pointed out that the company met its burden of proof
by relying on analyses conducted by other utilities, its own studies, and independent industry-
specific research. The Staff contends that the ALJ’s findings of fact with respect to witness credibility are entitled to significant deference because the ALJ has the opportunity to view the witnesses and hear testimony.

In summary, the Staff maintains that the record evidence satisfies the Court of Appeals’ remand instructions and urges the Commission to adopt the PFD.

Discussion

The Commission finds the PFD well-reasoned and adopts its findings and conclusions as discussed below. As an initial matter, the Commission agrees that the scope of the remand involved only the pilot AMI program and costs at issue in the November 2 order. Thus, the Commission finds it unnecessary to address any issues related to full deployment of AMI in this order. As the ALJ pointed out, in addition to approving the $2.3 million pilot costs, the Commission adopted a set of guidelines providing significant ratepayer protections as part of its discussion of AMI in the November 2 order. The ALJ further noted that the Commission reviews incremental AMI costs in every rate case to assess the reasonableness and prudence of those costs. Finally, a subsequent phase of Consumers’ AMI program was approved in the November 4, 2011 order in U-16191, which was affirmed by the Court of Appeals shortly after the Court’s remand order in this case was issued.

The Commission agrees with the Staff and Consumers that the record on remand fully supports a finding that the pilot AMI costs approved in the November 2 order were just and reasonable. As such, the Commission rejects the Attorney General’s claim that the ALJ somehow inappropriately reduced or shifted the burden of proof in this proceeding. As Consumers and the Staff point out, Consumers’ testimony was supported by various analyses from other utilities with more advanced AMI programs, the company’s own assessment of its pilots, and independent research. While the
Attorney General filed testimony challenging the company’s case, the ALJ appropriately weighed
the evidence and found Consumers’ testimony and exhibits more persuasive.

Having considered the record developed in this matter, the Commission finds that the
$2.3 million cost recovery for Consumers’ AMI pilot is reasonable and prudent, and in the public
interest. The Commission further concludes that the competent, material, and substantial evidence
presented after remand supports the authorized cost recovery.

THEREFORE, IT IS ORDERED that on the basis of the record developed after remand,
Consumers Energy Company’s request to recover the costs associated with its advanced metering
infrastructure pilot program is approved.

The Commission reserves jurisdiction and may issue further orders as necessary.

Any party desiring to appeal this order must do so in the appropriate court within 30 days after
issuance and notice of this order, under MCL 462.26.

MICHIGAN PUBLIC SERVICE COMMISSION

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John D. Quackenbush, Chairman

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By its action of October 7, 2014.
Greg R. White, Commissioner

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Mary Jo Kunkle, Executive Secretary
Sally A. Talberg, Commissioner