# NET METERING COMPLIANCE FILING 2016 (DOCKET 14-035-114) INDEX

## Gary W. Hoogeveen Direct Testimony (20 pages)

Introduces and Supports the Compliance Filing which requests modifications to the net metering program, including a new rate structure for residential net metering customers. He also describes a corresponding tariff advice letter, filed concurrently with the Compliance Filing, that requests to close to new service the currently effective Schedule 135, Net Metering Service, and approve, in its place, proposed Schedule 135A, which mirrors Schedule 135 and would be in place temporarily until the Commission makes the final determination in Subsection Two of the Net Metering Statute.

## Joelle R. Steward Direct Testimony and Exhibits (38 pages)

Explains and supports the Company's filing and the proposed new tariffs – Schedule 136, Net Metering Program, and Schedule 5, Residential Service for Customer Generators. She also (i) explains the Company's proposal for new or updated application fees for interconnection requests based on a more current assessment of the administrative costs and (ii) sponsors the conforming changes in the interconnection agreements.

Exhibits of Joelle R. Steward
Exhibit RMP\_\_(JRS-1) Proposed Tariff Revisions (Schedule 136 and Schedule 5)
Exhibit RMP\_\_(JRS-2) Revised Interconnection Agreements (clean and redlined)
Exhibit RMP\_\_(JRS-3) Proposed Rates - Schedule 5
Exhibit RMP\_\_(JRS-4) Peak Period Occurrences
Exhibit RMP\_\_(JRS-5) Example of Interval Demand Measurements
Exhibit RMP\_\_(JRS-6) Calculation of Offset Credit
Exhibit RMP\_\_(JRS-7) Bill Impact Summary
Exhibit RMP\_\_(JRS-8) Proposed Application Fee Calculation

Workpapers of Joelle R. Steward
Exhibit RMP\_\_(JRS-4) - Workpaper.xlsx
Exhibit RMP\_\_(JRS-5) Workpaper.xlsx

Exhibit RMP\_\_\_(JRS-6) - Workpaper.xlsx
Exhibit RMP\_\_\_(JRS-7) Workpaper.xlsx
Exhibit RMP\_\_\_(JRS-8) Workpaper.xlsx
Figure 1 -Growth in Net Metering Participation.xlsx
Figure 4 - Average Profiles by Different Usage Levels.xlsx
Figure 5 - Residential COS and Charges.xlsx

Figure 6 - Changes in Avg Price Across LFs.xlsx

Figures 2 & 3 - Res Compared to Res-NEM Profiles.xlsx

Growth Since GRC.xlsx

Increase in Sch 5 Basic Charge Instead of Application Fee.xlsx

Large Non-Residential NEM Compensation.xlsx

Potential Future Cost Shifting for Res NEM.xlsx

Table 3 - Sch 5 Rates.xlsx

Table 4 - Res & Res NEM Characteristics.xlsx

Table 5 - Residential Cost Allocation Drivers.xlsx

UT NEM Blocking 2015.xlsx

## **Robert M. Meredith Direct Testimony and Exhibits** (31 pages)

Presents and supports the Company's cost of service analyses that were prepared to comply with the Commission's order which established a framework for determining the costs and benefits of the net metering program. Mr. Meredith's testimony demonstrates that the Company's cost of service studies are accurate and reliable, and are consistent with Commission-approved standards that have been approved over the years, and should be accepted by the Commission.

Exhibits of Robert M. Meredith	
Exhibit RMP(RMM-1)	Costs and Benefits of the Net Metering Program
Exhibit RMP(RMM-2)	Summary of Results for ACOS and CFCOS
Exhibit RMP(RMM-3)	Benchmark of Utah Residential Distributed Generation Production Shape to National Renewable Energy Laboratory's PVWatts® Distributed Generation Shape
Exhibit RMP(RMM-4)	Difference in Energy Sales Between CFCOS and ACOS
Exhibit RMP(RMM-5)	Bill Credits Related to the Net Metering Program
Exhibit RMP(RMM-6)	Customer Service and Billing Cost Related to Utah Net Metering Program
Exhibit RMP(RMM-7)	Administration Cost Related to Utah Net Metering Program
Exhibit RMP(RMM-8)	Engineering Cost Related to Utah Net Metering Program
Exhibit RMP(RMM-9)	Metering Cost Related to Utah Net Metering Program
Exhibit RMP(RMM-10)	Sampling Plans, Procedures and Selections for the Profile Metering Sample of Utah Residential Distributed Generation
Exhibit RMP(RMM-11)	Value of Excess NEM Credits
Exhibit RMP(RMM-12)	Summary of Results for NEM Breakout COS
Exhibit RMP(RMM-13)	NEM Breakout COS Compared to ACOS
Exhibit RMP(RMM-14)	Determination of Residential Net Metering Cost of Service At the Same Basis as Rates Set in Docket No. 13-084-184

Workpapers of Robert M. Meredith
Exhibit RMP\_\_(RMM-1) Backup
Net Metering COS Change File.xlsx

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Net Metering Program Cost Exhibit.xlsx
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Exhibit RMP\_\_\_(RMM-2) Workpapers.xls

Exhibit RMP\_\_\_(RMM-4) Workpapers.xlsx

Exhibit RMP\_\_\_(RMM-5) Workpapers.xlsx

Exhibit RMP\_\_\_(RMM-6) Workpapers.xlsx

Exhibit RMP\_\_\_(RMM-7) Workpapers.xlsx

Exhibit RMP\_\_\_(RMM-8) Workpapers.xlsx

Exhibit RMP\_\_\_(RMM-9) Workpapers.xlsx

Exhibit RMP\_\_\_(RMM-13) Workpapers.xlsx

Exhibit RMP\_\_\_(RMM-14) Backup

Exhibit RMP (RMM-14).xlsx

COS UT June 2015 - GRC Unit Cost @ Step 2 Rev.xlsx

Figure 2 - Company Profile vs NREL data.xlsx

KSLC December Cloud Cover Percentage 2011 to 2015.xlsx

KSLC May Cloud Cover Percentage 2011 to 2015.xlsx

Regression Results.xlsx

Table 1 - Net Cost-(Benefit) at Sys-State-Class Levels.xlsx

Table 2 - Private Gen to Full Req.xlsx

Table 3 - Parity to COS.xlsx

Utah NMT Production Estimates 2015 @ Generator.xlsx

Bill Credit Calculation

UT 2015 Present Revenues for Net Metering Filing.xlsx

UT Blocking 2015 With PG.xlsx

UT Blocking 2015 Without PG.xlsx

#### COS Models

A COS UT Dec 2015 NEM Breakout, xlsx

ACOS UT Dec 2015.xlsx

CFCOS UT Dec 2015.xlsx

Utah COS Procedures.doc

#### JAM Models

Actual JAM - Dec 2015.xlsm

CounterFactual JAM - Dec 2015.xlsm

### **Douglas L. Marx Direct Testimony and Exhibits** (12 pages)

Demonstrates that rooftop solar generation does not reduce the peak demand on the distribution system to a degree that could warrant a reduction in infrastructure. Instead, rooftop solar may actually increase the requirements for infrastructure at the local level. Further, residential net metering customers use the electric grid at a level higher than other residential customers. The total amount of energy transferred to and from the electric grid by net metering customers can exceed the amount of energy delivered to other customers by a significant amount. In addition, the

Company incurs additional costs associated with applications for rooftop solar generation and their interconnection.

Exhibits of Douglas L. Marx

Exhibit RMP\_(DLM-1) 2015 Distribution Rooftop Solar Study - Bingham #11

## Michael G. Wilding Direct Testimony and Exhibits (9 pages)

Presents and supports the Company's net power cost ("NPC") analysis of the net metering program for the 12-month period from January 1, 2015 through December 31, 2015 ("Study Period").

Exhibits of Michael G. Wilding

Exhibit RMP\_(MGW-1) NPC Analysis

Exhibit RMP\_\_(MGW-4) 2015 Actual Net Power Cost

## Confidential Exhibits of Michael G. Wilding

CONF Exhibit RMP\_\_(MGW-2) Base GRID Study: Utah Schedule 37 filing Dated April 30, 2015

CONF Exhibit RMP\_(MGW-3) No Net Metering GRID Study

Workpapers of Michael G. Wilding

Tables for Wilding Testimony.xlsx

## Confidential Workpapers of Michael G. Wilding

UT Net Metering - GRID AC Study CONF \_Base and NoNetMetering.xlsm

UT Net Metering - GRID AC Study CONF \_Base.xlsm

UT Net Metering - GRID AC Study CONF \_NoNetMetering.xlsm