



Puget Sound Energy

Meter Upgrade Project and Schedules 171 Implementation Status Report

Reporting Period:

January 1, 2018 - December 31, 2019

January 1, 2020 – January 13, 2020

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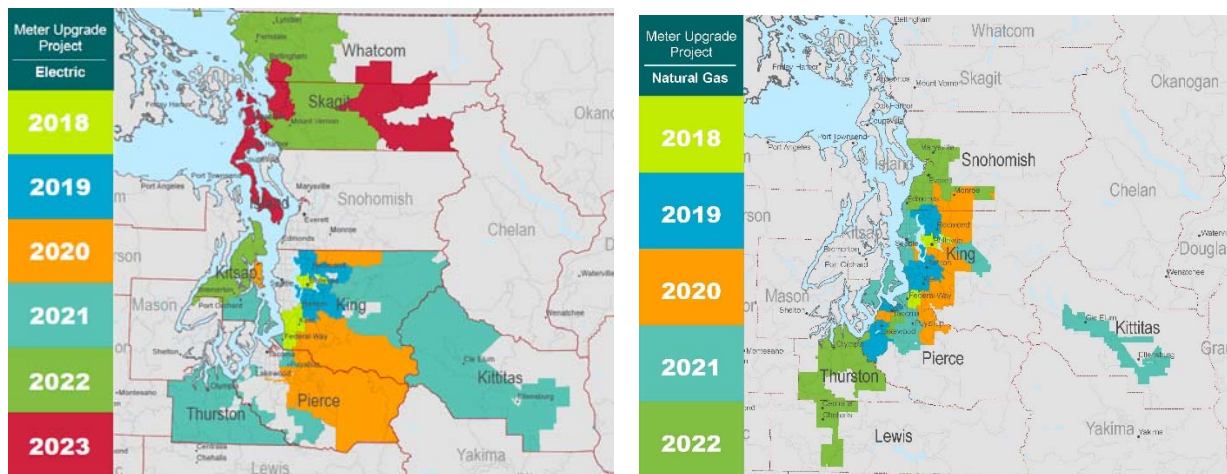
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Introduction

Pursuant to Order 01 of Dockets UE-180860 and UG-180861, Puget Sound Energy (“PSE”) provides its first report of its electric and natural gas Schedules 171 Optional Non-Communicating Meter (“NCM”) Service implementation status and costs. This report reflects the status of PSE’s Meter Upgrade Project and Schedules 171 and accounting records as of January 13, 2020. The data presented in this report reflects the cumulative results of the years of 2018 and 2019, and the period of January 1, 2020, through January 13, 2020.

Although the new electric and natural gas Schedules 171 Optional NCM Service are available to customers beginning July 1, 2019, PSE’s preparation and customer inquiries about NCM service began in 2018 prior to approval of the new service. The results presented in this initial reporting are preliminary and will be supplemented and updated as PSE makes improvements and/or adjustments to its processes and reporting tools for this new optional NCM service.

The costs associated with the implementation of the NCM service outlined in this report are not final and not comprehensive as this optional service requires on-going information technology and customer support. Additionally, some of the implementation and operation costs of electric and natural gas NCM service are recorded in the Advanced Metering Infrastructure (“AMI”) implementation and operation costs, which PSE is still in the act of identifying.



The maps above outline the historical of meter exchange for 2018 and 2019 and the areas where exchanges are anticipated to begin by year. These maps are updated frequently and available at pse.com/meterupgrade.

Reporting Elements

1. Status of the Meter Upgrade Project, including geographic areas where AMI meters have been installed and the number of meters installed.

AMI meters/modules installation as of 12/31/2019 by quarter:

		Actual		
		Electric	Natural Gas	Total
2017	Q4	36	0	36
2018	Q1	385	0	385
2018	Q2	32,267	214	32,481
2018	Q3	67,273	14,423	81,696
2018	Q4	72,493	30,321	102,814
2019	Q1	57,528	43,707	101,235
2019	Q2	51,507	28,362	79,869
2019	Q3	52,707	42,834	95,541
2019	Q4	52,532	40,146	92,678
Total		386,728	200,007	586,735

AMI meters/modules installation as of 12/31/2019 by county:

County	Electric	Natural Gas	Total
ISLAND	0	0	0
KING	386,726	176,288	563,014
KITSAP	0	0	0
KITTITAS	2	0	2
LEWIS	0	0	0
PIERCE	0	23,719	23,719
SKAGIT	0	0	0
SNOHOMISH	0	0	0
THURSTON	0	0	0
WHATCOM	0	0	0
Total	386,728	200,007	586,735

The following cities have had AMI exchanges in either natural gas or electric, but not necessarily both fuels: Algona, Auburn, Beaux Arts, Bellevue, Bothell, Burien, Camp Murray, Carnation, Clyde Hill, Des Moines, Federal Way, Fircrest, Hunts Point, Issaquah, Joint Base Lewis McChord, Kent, Kenmore, Kirkland, Medina, Mercer Island, Newcastle, Normandy Park, Preston, Redmond, Renton, Sammamish, SeaTac, Tacoma, Tukwila, University Place, Woodinville, and Yarrow Point.

2. Information on customer communication results, including the number of customers who have informed PSE of their Initial Request for service under electric and natural gas Schedules 171

All customers are sent a letter notification 3-5 weeks ahead of the exchange to an AMI meter. The letter contains information about electric and natural gas Schedules 171 NCM service. Interested customers can contact PSE via phone, email or US mail to learn about the NCM service or to request the optional service. As of January 13, 2020, PSE received electric and natural gas Schedules 171 NCM service requests associated with 4,910 electric and natural gas meters. Of these 4,910 meters, 4,662 are residential service meters and 248 are for non-residential services, which do not qualify for the NCM service.

	NCM Electric Meter Installed/Natural Gas Module Removed	Schedule 171 Approved, Pending NCM Meter Installation/Natural Gas Module Removal
Electric	326	23
Natural Gas	248	28
Total	574	51

As shown in the table above, a total of 574 NCM service requests have been completed. An additional 51 NCM service requests have been approved and are pending completion. NCM service requests associated with 1,852 meters are in process.

3. The number of customers on electric and natural gas schedules 171, including a) the non-payment disconnection count, b) the bill payment assistance status, and c) status of their Schedule 171 One-Time Charge Payment

	Electric	Natural Gas
Schedule 171 billed accounts as of 1/13/2020	227	25
Number of accounts with non-payment disconnection during 1/1/2017-1/31/2020	1	0
Number of accounts with bill payment assistance during 1/1/2017-1/13/2020, including pledges from the federal government, PSE or organizations that provide assistance through PSE	1	1
Count of Schedule 171 One-Time Charge ¹	9	0

¹ For Initial Request made by a customer at a Point of Delivery where an AMI meter is currently installed, One-Time Charge is applicable.

4. PSE costs associated with the implementation of electric and natural gas schedules 171, including capital costs and maintenance costs for information systems, meter networks, meter exchange, meter reading, and other related costs associated with providing service under electric and natural gas Schedules 171

The following table is a summary by year of the capital costs associated with SAP work management and interface configuration and programming changes to support the NCM service. The information technology work includes, for example, adding new rate schedules and charges, NCM service request tracking, expanding bi-monthly meter reading and billing functionality, automation of customer NCM communication, and IT system testing.

PSE is still in the process of identifying the NCM service related costs that are recorded within the Meter Upgrade Project costs during 2018 and 2019. In the second report due in July 2020, PSE will have better cost data about the NCM service implementation and on-going meter reading and customer support.

Year	Sum of Amount
2018	\$1,521,424.64
2019	\$2,280,045.61
Total	\$3,801,470.25

5. Revenues associated with electric and natural gas Schedules 171

Schedule 171	Additional Bi-Monthly Service Charge		One-Time Charge	
	Per Meter	Total Billed as of 1/13/2020	Per Meter	Total Billed as of 1/13/2020
Electric	\$15	\$5,340	\$90	\$810
Natural Gas	\$15	\$555	\$50	\$0

6. Number of Initial Requests that did not result in a submitted and completed Service Request

As of January 13, 2020, of the 4,910 meters with a NCM service request, the requests associated with 1,518 meters have been cancelled and the requests associated with 915 of the meters have been rejected by PSE per the terms and conditions of Schedule 171. Please see section 2 of the report for more information about Initial Requests.

7. Number of electric and natural gas Schedules 171 customers who discontinue service on Schedule 171

As of January 13, 2020, no customers have discontinued service on Schedule 171 after being enrolled.

8. PSE discussion of other issues associated with providing service under electric and natural gas Schedules 171

A. Challenges with Manual Meter Reading

For two decades, PSE has not had to manually read meters to gather the usage information for billing for almost 100% of its meters. All of PSE's systems have been designed to collect meter reads wirelessly since the installation of AMR technology in the late 1990s. The reintroduction of manual reading has required the creation of entirely new internal and external processes, and company and IT structure changes.

Aside from the structures and processes needed, customer expectations and behaviors have changed; customers have naturally adapted to no longer having to provide regular access to the meter for reading. Residences have been altered to include fences, locked gates, planted vegetation, siding, and decoration around the meter face. This can make a manual meter read difficult. In addition to the physical impediments to reading the meter, the necessity of having someone on customers' property is a change for the customers. Even customers who are requesting NCM are needing time to discuss and understand that PSE will now need access to their property on a regular basis.

The set up and execution of efficient internal and external processes that support the manual meter reading system for the electric and natural gas Schedule 171 NCM service in an era of wireless reading has proved difficult. PSE did not previously have a group that focused on manually reading meters, so this new optional NCM service has necessitated the acquisition of additional resources. Additionally, since meters have not needed to be read manually, customers who participate in the NCM service are not accustomed to making their yard accessible for the meter reader.

PSE and its current meter reading vendor, Landis+Gyr, reached an agreement on November 30, 2019, on the task of manual meter reading for non-communicating meters. The agreement consists of a one-time set up fee, annual fixed charge, and

hourly rate for the time that Landis+Gyr actually spends on obtaining the individual read. Since this is an hourly rate and it is based on the start and stop time to gather the reads, PSE is working with Landis+Gyr on planning and clustering the meter read routes to maximize efficiency and reduce the costs per read.

B. *New Customer Communication and Education Needs*

PSE is respectful of its customers' preferences regarding the optional NCM service. As such, PSE has implemented a robust communications and education process to provide customers with the opportunity to discuss and ask questions about the NCM service and the Meter Upgrade project. This approach requires extensive and in-depth conversation with customer; PSE's customer communication team has consistently found that customers have both incorrect information and numerous questions on a variety of topics that may be tangentially connected to the meter. This has required shifting priorities and dedicating resources to meet the new customer needs has led to a large variance in how long case processing takes.

PSE customers have never had a metering choice; this customer choice has created a need for enhanced communication and education around meters that was previously not necessary. The meter and its technology is not something that customers had to think much about and the general understanding of metering technology is low. PSE has been diligently working to ensure that customer's questions are answered in a timely fashion and they are given the information needed to make an informed choice on their metering. These questions have included such topics as RF² v. EMF³, how the different metering types work, what to expect for installation, "dirty electricity", as well as 5G⁴ and if it is related to AMI, just to name a few.

A simplest request to participate in the NCM service takes a little less than an hour from initial request to have arrangement on an NCM installation, but other cases have taken over 50 hours of employee time from initial request to NCM installation arrangement. PSE communicates with customer through a variety of mediums and also may need to engage multiple departments including the call center (which has a specialized back office team - staffed every business day to meet the communication needs of customers interested in NCM service), communications outreach, escalated complaints, legal, and the Meter Upgrade Project teams. This depth of resources is required to educate and answer the customer's questions so that they understand their decision of whether or not to choose the NCM service.

C. *Extended NCM Installation Timeline*

PSE has found the installation time for a NCM to be extended mainly due to the following three reasons:

- First, some customers experience a long timeline to have a NCM installed, which is based on whether the Meter Upgrade Project has reached their area. As shown in section 1 above, the Meter Upgrade project is a multi-year process.

² radio frequency

³ radiofrequency electromagnetic fields

⁴ 5th generation of mobile networks (5G)

PSE has received requests for NCM service from customers in an area that is not scheduled to have the AMI upgrade for another year, so these customers will need to wait until the AMI and NCM services become available in an area. The call center's specialized back office team works through these requests as AMI and NCM services becomes available.

- Second, PSE's process is designed to give customers adequate time to return the completed NCM service request form to finalize their optional metering choice. To date, PSE is experiencing several weeks to months for customers to return the required NCM form, and sometimes customers do not return the NCM form at all, which means that it can take months to move a NCM service request forward.
- Finally, with regard to natural gas NCM implementation, installation time is extended due to limited crew availability. PSE's natural gas first response group has been designated recently to perform the task of removing the modules for natural gas meters that are going to be served with the NCM service. The natural gas first response group, however, is foremost responsible for any safety related work. The natural gas communicating module removal for NCM service work is secondary to the safety related work, which can slow the removal of the modules to make the natural gas meter non-communicating.