

Paul A. Colbert
Associate General Counsel
Regulatory Affairs



January 31, 2019

Hon. Kathleen H. Burgess, Secretary
New York State Public Service Commission
Three Empire State Plaza
Albany, NY 12223-1350

Re: Central Hudson Gas & Electric Corporation's REV Demonstration Project Implementation Plan Status Update (Q4 2018) in Cases 14-M-0101, 14-E-0318, and 17-E-0459

Dear Secretary Burgess:

Central Hudson Gas & Electric Corporation ("Central Hudson") submits for filing in the above-referenced cases its REV Demonstration Project Implementation Plan Status Update. A request for confidential treatment was submitted to the Records Access Officer today, along with Report Attachment 1.

If there are any questions related to this filing, please do not hesitate to contact Joe Hally, Manager-Regulatory Affairs at 845-486-5373 (jhally@cenhud.com) or Laura Butler, Director-Digital Customer Experience at 845-486-5431 (lbutler@cenhud.com).

Respectfully submitted,

/s/Paul A. Colbert

Associate General Counsel
Regulatory Affairs

cc: Marco Padula (DPS)

284 South Avenue
Poughkeepsie, NY 12601

(845) 452-2000
Phone: (845) 486-5831 Cell: (614) 296-4779
Email: pcolbert@cenhud.com
www.CentralHudson.com



Central Hudson Gas & Electric



**Reforming the
Energy Vision**

**Demonstration Project
Implementation Plan 2018 Q4 Status
Update**

Regarding Cases 14-M-0101, 14-E-0318 and 17-E-0459

January 31, 2019

Contents

Executive Summary	3
Section 1: Project Plan	6
A) Hypotheses	6
B) Schedule	7
C) Customer Populations	8
Section 2: Organization Structure & Governance	9
A) Project Team Approach	9
B) Roles and Responsibilities	11
C) Governance	12
Section 3: Results and Key Learnings	13
A) Project Implementation	13
B) Revenue	13
C) Challenges and Opportunities	14
D) Customer Feedback	15
Section 5: Financials	16
Section 6: Risks, Opportunities and Mitigation Strategies	17
Appendix 1: Electric Heat Marketing Campaign	19

Executive Summary

This report serves as the fourth quarter report for Central Hudson's in progress Reforming the Energy Vision (REV) Demonstration Project, Insights+. This report is being filed in response to the DPS Staff's Reforming the Energy Vision Demonstration Project Assessment Report dated November 10, 2015, filed within Case 14-M-0101, Cases 14-E-0318/14-G-0319 Order Approving Rate Plan,¹ and Cases 17-E-0459/17-G-0460 Order Adopting Terms of Joint Proposal and Establishing Electric and Gas Rate Plan.² This document provides an overall summary of the Insights+ project and the fourth quarter ("Q4") of 2018 progress, next steps, roles, responsibilities, governance, work plan, budget and reporting going forward for Insights+.

Central Hudson's Initial DSIP filing (dated June 30, 2016) contained a comprehensive analysis of the benefits and costs of implementing an advanced metering infrastructure ("AMI") which was performed pursuant to the Order Adopting Distributed System Implementation Plan Guidance and in accordance with the Order Establishing the Benefit Cost Analysis Framework.³ The analysis did not support universal implementation across the service territory. However, Central Hudson recognizes that there may be customers that desire more granular energy usage information. This led to the creation of the Insights+ offering, an extension of CenHub Insights. Insights+ builds on the user interface provided as part of CenHub to allow the customer to dive deeper into the data to see usage by month, week, day or hour. The Insights+ offering allows interested customers access to more granular data and services through a low cost subscription.

The intent behind the creation of Insights+ was to deliver the following opportunities for customers without creating the cost burden on rate payers for a system-wide deployment of advanced metering:

- Introduce educational tools to assist customers in more effectively managing their energy bills
- Leverage the CenHub platform to deliver visual aids for customers to correlate energy use to billing at a more granular level
- Evaluate potential new revenue streams
- Evaluate potential partnership opportunities to introduce new products and services to customers

Today customers have a vast array of data available to them from wearable technology, smart home apps, vehicles, and many other sources. The experiences that are delivered have influenced customer expectations, regardless of business vertical. 2019 trend predictions related to customer experience include more purpose driven designs and use of artificial intelligence.⁴ Opportunities for customers to make informed decisions through either physical interactions or information tied to personalized data and sensory triggers that assist in making the right purchase for them are transformational.⁵

¹ Case 14-E-0318 & 14-G-0319 – Order Approving Rate Plan, Issued and Effective June 17, 2015.

² Case 17-E-0459 & 17-G-0460 – Order Adopting Terms of Joint Proposal and Establishing Electric and Gas Rate Plan, Issued and Effective June 14, 2018. (p. 27)

³ Case 14-M-0101 – Order Establishing the Benefit Cost Analysis Framework, Issued and Effective January 21, 2016; Order Adopting Distributed System Implementation Plan Guidance, Issued and Effective April 20, 2016.

⁴ Forrester. "Transformation Goes Pragmatic". *Predictions 2019*.

⁵ Shapiro, Richard. "2019 Customer Experience Trends". *Customer Think*, December 5, 2018.

Figure 1: Customer Experience Industry Trends



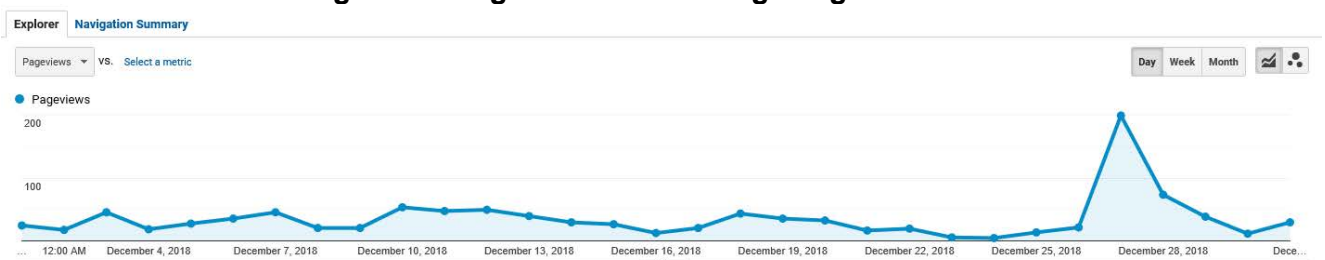
Certain elements of these principles can be applied to the Utility industry and tested through the Insights+ Demonstration Project.

- Do customers want more data about their energy use?
- Is this a service that they would be willing to pay for?
- If data is available will it alter their usage or buying behaviors?

Through Q4 of 2018 the value of Insights+ is still being explored. Although the Insights+ webpage is visited often, conversion rates are less than 1%, indicating that more granular meter data alone is not enough to drive wide scale adoption of the paid subscription service. However, Central Hudson continues to explore the features and experiences that can be added to the service to drive larger adoption. The challenge is how to offer new experiences without increasing the cost of the service.

In Q4, Central Hudson created a marketing campaign that promoted the Time of Use Rate with Insights+ to the electric heat customer segment. The bundled offer created interest as was visible in the spike in page visits on December 27th, as seen in Figure 2, when the email was sent but only resulted in 2 enrollments. This again tells us that customers expect more in the experience or that the offer lacks a compelling enough message to drive action. Marketing content can be viewed in Appendix 1.

Figure 2: Insights+ Overview Page Pageviews



In addition to the conversion rate challenge, issues with meter data transfer and visualization have been identified. On a consistent basis, there have been cases of individual meter data failing to populate the 3rd party data files. Separately, at times pockets of data that have been included in the data files fail to display on the customer facing display. This resulted in having to issue 21 subscription refunds. These issues contribute to customer dissatisfaction, and inhibit the plans to implement potential advanced alerting and messaging functionalities.

Concurrently, there has been success in the utilization of the Insights+ metering technology to satisfy new policy requirements such as those established through the Value of DER proceeding. Also a deeper partnership was developed with the 3rd party implementers of the Targeted Demand Response program that reduced their cost to capture data for measurement and verification through the use of Insights+ meters while providing customer access to advanced information at no additional cost. This continues to be the greatest customer benefit and exploration of partnership opportunities in this space will continue. In 2018 we expanded the population of customers receiving the Insights+ service by 225 customers with costs being covered by the TDR Implementer.

Section 1: Project Plan

A) Hypotheses

The subscription fee offer for interval data is unique within the Utility space. Therefore Central Hudson looks to test the willingness to pay and how availability of advanced meter data can influence customer behavior. The following hypotheses is being tested during the Insights+ project.

Table 1: Test Statements

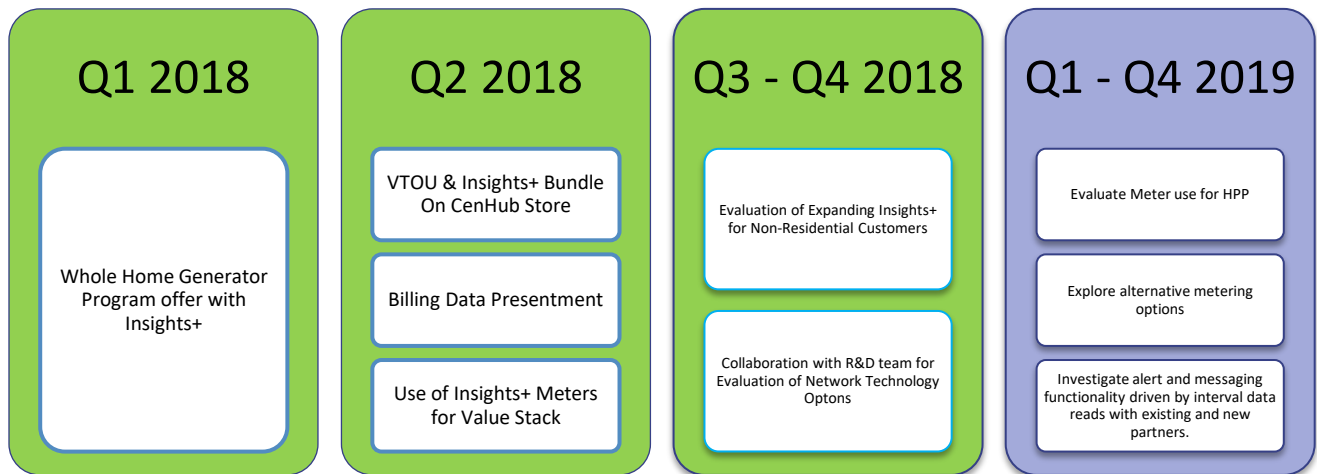
Test Statement	Hypothesis	Program Results
<p>Customers may be willing to pay for Advanced Data Services.</p>	<ul style="list-style-type: none"> • If we offer an Insights+ package featuring an intuitive and engaging user experience and utilize multi-channel and targeted marketing... • then 1,000 customers will subscribe to the Advanced Data Services package within 12 months of the September 30, 2016 Phase 2 Go Live Date. 	<p>Total Insights+ Enrollments - 513</p> <ul style="list-style-type: none"> • Peak Perks M&V enrolled population - 370 • Insights+ enrolled residential population - 119 <p>The Action Items within Table 7 detail the steps we are taking to try to improve upon this metric and increase participation.</p> <p>We are also finding that the Insights+ meters are satisfying evolving business needs that were not predicted at the initial conception of the program such as M&V for the Peak Perks program and VDER. These opportunities result in reduced cost to the customer for the program and increase the availability of the platform features.</p>
<p>Advanced Data Services may influence customers' behavior.</p>	<ul style="list-style-type: none"> • If Central Hudson directly markets to Insights+ subscribers and provides insights and tips regarding management of their energy usage and cross-promotes programs such as Targeted Demand Response... <ul style="list-style-type: none"> ○ then customers with Insights+ subscriptions will make 10% more product purchases per customer than the 'Digitally Engaged Residential Customer' within the first 12 months of subscription enrollment (measured on a rolling 12 month avg. beginning 12 months after the September 30, 2016 Phase 2 Go Live Date.) ○ 25% of Advanced Data Services subscribers will elect a non-standard rate offering such as our existing Time of Use rate within 2 	<ul style="list-style-type: none"> ○ The digitally engaged customers made a total of 11,906 purchases, for an average of 0.07 purchases per customer. Advanced Data Services subscribers made more than six times as many purchases per person: a total of 211 purchases, an average of 0.5 purchases per customer. ○ <1% of Advanced Data Services subscribers have elected the Time of Use rate. This is much lower than the hypothesis of 25%.

	years of the September 30, 2016 Phase 2 Go Live Date.	
--	---	--

B) Schedule

Central Hudson successfully launched the Insights+ service offering for residential customers in June of 2017. Since that time, a significant uptick in voluntary enrollment has not occurred despite the enhancements to the customer interface or the reduced priced offer available when customers enroll in Insights+ with the Voluntary Time of Use Rate.

Figure 3: Insights+ Project Plan by Quarter



During Q4, the evaluation of Insights+ for non-residential application continued, but the solutions found have been cost prohibitive. Multiple vendors that offer building management systems (BMS) and web platforms that can integrate with AMI were evaluated. The search continues for solutions that provide value to the customer while improving Central Hudson's relationship with its customers through advanced analytics and integrated software interfaces. Access to interval meter data has the potential to enhance customer's ability to understand energy use/costs and make informed decisions about energy efficiency, beneficial electrification, and related products and services. Non-residential customer energy data analytics could include end-use disaggregation, weather and operational driven consumption, and customized savings calculations for EE and beneficial electrification measures. Central Hudson will continue to look for more cost effective solutions and partnerships to deliver value to the non-residential population.

As Central Hudson's communication network evolves, integration of the Insights+ technology will continue to be explored. We are currently limited to cellular technology but with the build out of our Network Strategy projects, that include wireless mesh networks, more options could be opened up in the future. In Q4 The project team attended multiple sessions with Engineering and Metering Services to express interest in their work. The Engineering team is investigating mesh network technologies, which are different than the cellular network topology we utilize now

for Insights+, and the ability to backhaul information through the Network Strategy infrastructure. Once these methods are tested, we will analyze the findings to see if there are points of alignment for potential Insights+ integration.

In 2019, evaluation of AMI metering to satisfy the needs for customers on the Hourly Pricing Provision (HPP)⁶ and alternative metering options will continue. Additionally, alert and messaging functionality that can be added to the Insights+ experience will be evaluated.

C) Customer Populations

Central Hudson analyzes customer populations within the service territory in an attempt to understand what online behaviors and DER program participation rates are prevalent among varying customer segments. Through preliminary analysis, customers can be defined according to the Test Populations defined in Table 2.

Table 2: Test Population

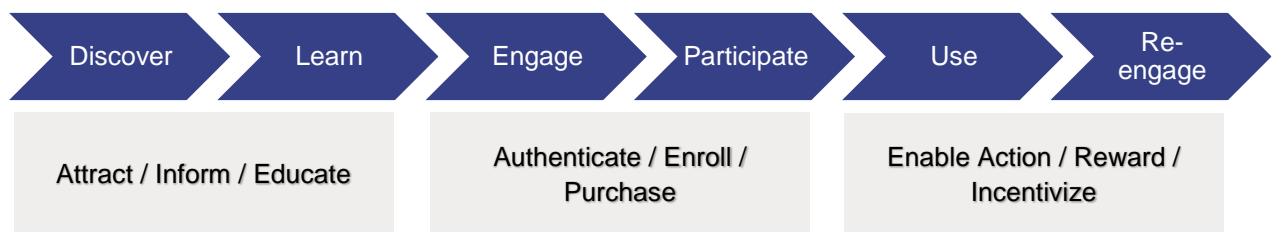
Test Population Description	Selection Method	Q1 2016 Population Size	Q4 2018 Population Size
Residential PV Customers: <ul style="list-style-type: none"> to be analyzed within Channel and Segment Tests 	Identification / Selection Method: <ul style="list-style-type: none"> Net Meter installation record 	4,883	8,049
Insights+ Subscriber: <ul style="list-style-type: none"> to be analyzed within Test Statement #5 to be analyzed within Channel and Segment Tests 	Identification / Selection Method: <ul style="list-style-type: none"> Voluntarily Subscribes Pays the Associate Subscription fee 	N/A	95
Targeted Demand Response: Residential customer who voluntarily enrolled in CenHub Peak Perks and Insights+		0	394
Insights+ / TOU Bundle: Residential customer who enrolls in Time of Use with an Insights+ Meter		0	24

⁶ HPP Bulletin No. 3, June 2011 - In accordance with Case 08-E-0887 issued and Effective June 22, 2009 and Case 09-E-0588 Issued and Effective June 18, 2010.

Section 2: Organization Structure & Governance

The Insights+ program continues to be led by the Energy Transformation & Solutions (ET&S) department with support from Information Technology (IT), the Contact Center, Corporate Communications, Engineering, Metering, Cost & Rate and Customer Accounting. In addition to the internal network an external network with REV Connect, NYSERDA, existing program partners, and fellow utilities has been developed. Insights+ utilizes a customer centric approach to design and evaluation in order to model and analyze the customer journey.

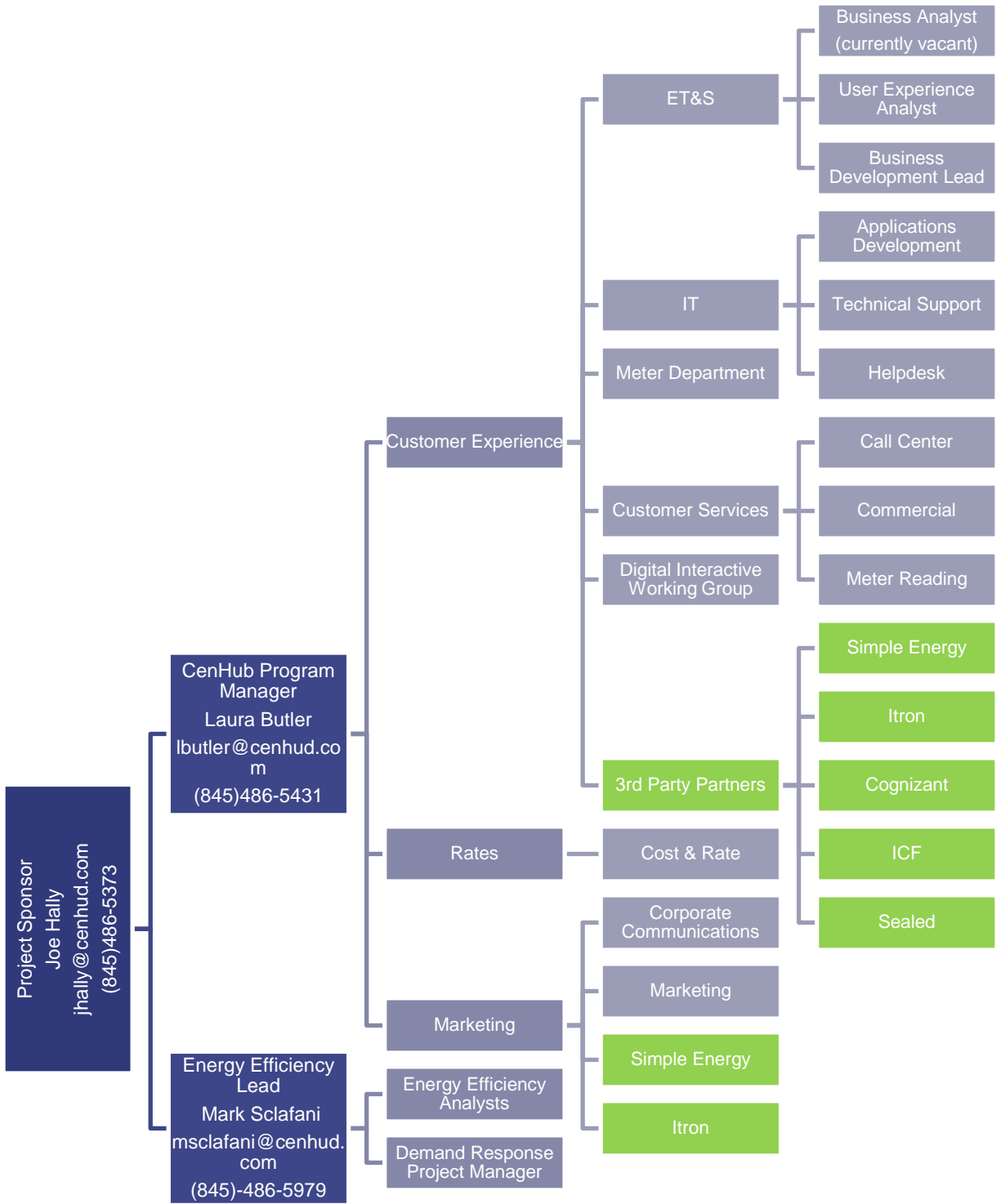
Figure 4: Sample Customer Journey



A) Project Team Approach

Each department and external partner plays a key role in program development and execution. To maintain consistency Insights+ has utilized the same team structure as was in place for the development of CenHub. The team structure is detailed in Figure 5. This cross functional team approach has ensured a mix of subject matter experts paired with dedicated resources to create the proper design, training and implementation plans paired with timely and informative marketing messaging. This method of cross-functional team involvement will be maintained going forward for continuation of the existing programs as well as for development of new products and services and new demonstration projects.

Figure 5: Program Execution Team



B) Roles and Responsibilities

To ensure success and accountability for all tasks, the Program and Project management team members outlined all project related responsibilities and identified the various levels of ownership for each task. The program objectives and tasks associated with meeting these objectives are captured in various forms starting with a Project Charter, architecture and design diagrams and prototypes, customer journey maps, process flow diagrams, detailed testing plans, training documents, marketing plans and collateral, results and bug fix prioritization and ending with a step by step deployment plan for moving the changes to the live system.

Table 3: Roles & Responsibility Matrix

Central Hudson Gas & Electric	Description
Project Management	Central Hudson owns overall project delivery and success criteria.
Integration with Central Hudson website and Internal Systems	Central Hudson has integrated Simple Energy's customer engagement portal (CenHub Insights+) into its existing website and mobile site.
Testing Across Platforms	Central Hudson creates detailed test plans and scripts for integrating new functionality and fixes to existing functionality as needed.
Access to Customer Data	Central Hudson is facilitating daily data feeds in the agreed upon file format between Simple Energy and Itron to facilitate associated program administration and marketing.
Customer Outreach and Marketing Strategy	Central Hudson is informing the customer base of the upcoming availability and functions of CenHub and Insights+ through a multi-channel marketing strategy developed in concert with internal resources and 3 rd party partners.
Metering Solutions	Central Hudson schedules and performs meter changes for subscribing customers. Central Hudson has expanded the use cases for the interval meters to address existing business challenges related to VDER and VTOU.
Data QA/QC	The ETS team works very closely with the internal Business Intelligence team to leverage all available program participation data and relevant customer insights
Sales & Partnership Development	Central Hudson has a dedicated resource prospecting partnerships to develop additional customer offers
Partner	Description
Integration with Internal Systems	Simple Energy and Itron continue to provide requirements, information delivery standards, platform upgrades, fixes and assistance to support Central Hudson's Insights+ platform.

	All partners continue to work together with the Central Hudson team for future releases and ongoing enhancements.
Marketing Strategy	Simple Energy and Itron provide expertise, experience, and guidance in order to assist Central Hudson with the development of a Multi-channel marketing strategy.
Insights+ – Data Repository and Management (ITRON)	Itron hosts the Meter Data Management Repository for the duration of the project per contract terms. Itron will provide meter usage data in the agreed upon file format and time interval to facilitate program and partner support. Itron’s support team responds to support tickets filed by Central Hudson.
Project Management	Cognizant is continuing to provide overall Project Management for the technical releases of CenHub related functionality. Each partner has assigned an Engagement Manager for ongoing relationship support and planning of future functionality as well as a ticketing/reporting mechanism for resolution management.

C) Governance

Central Hudson tracks progress, alignment to project objectives and performance in comparison to original hypotheses throughout the life of the project according to Table 4.










Table 4: Governance Approach

Format	Frequency	Participants
Standups – short in person discussion to identify any blockers or clarify tasks items	As needed based on criticality of project tasks	All project team members
Program short term planning – in person review of all requirements and assignment of tasks to team members	As needed based on criticality of project tasks	ET&S, vendor partners as appropriate
Marketing plan reviews – combination of written documentation and in-person/conference call discussion	Quarterly	Marketing director, project and program managers, SMEs as needed, project sponsor, vendor leads
Project Update – documented newsletter of the latest progress for high level awareness	Bi-Weekly	Created by the ET&S team and distributed to all relevant stakeholders across Central Hudson and partner vendors
REV Connect Innovation Sprints – Central Hudson participates in idea evaluations, workshops and sprint presentations to define system needs pertaining to various topic areas	As scheduled by the REV Connect Committee	ET&S, REV Connect Committee, NYS Utilities, NYSEERDA, DPS Staff, other organizations as appropriate
Process Brainstorming Workshops to solution improvements to existing processes	Quarterly	ET&S, external partners and support departments depending on focus topic

Section 3: Results and Key Learnings

A) Project Implementation

Table 5: Targets and Results

Milestone	Program Lifetime Target	Program Lifetime Cumulative Actuals	2018 YTD
<i>CenHub Phase 3 Insights+ Enrollment - Go Live</i>	9/15/2016	Release 1 (Comverge M&V) - 3/31/2017 Release 2 (Residential Enrollment) – 6/6/2017	N/A
<i>Insights+ Subscriptions</i>	4,000	 513	382
<i>Insights+ PSR</i>	\$958,080	 \$23,865	\$14,528
<i>Insights+ Capital Expenditures</i>	\$71,000	 \$328,357	\$0
<i>Insights+ O&M</i>	\$847,662	 \$149,903	\$809
<i>Meter Communications</i>	\$650,880	 \$51,212	\$39,772
<i>Meters</i>	\$833,800	 \$459,020	
<u>Status Key</u>			
 On or exceeding target  Off target <=10%  Off target >10%			

B) Revenue

Table 6: Insights+ Revenue by Quarter

Year	Q1	Q2	Q3	Q4
2016	N/A	N/A	N/A	N/A
2017	\$100	\$610	\$1,414	\$1,953
2018	\$2,118	\$3,142	\$7,157	\$7,331

C) Challenges and Opportunities

1. Cost:

As noted in the Executive Summary, conversion rates on the Insights+ offer have been minimal. The subscription cost of \$4.99 is a barrier to adoption. Additional features such as budgeting tools, proactive alerts and load disaggregation have been explored. Each of these features introduces more fees and ultimately drives up the cost to deliver Insights+. This would exacerbate the price point barrier so the team continues to explore means to enable new experiences at no additional cost.

2. Technology and Data Capture:

Because the Insights+ offer is subscription based and the consumer market is driving the location of the meter device deployment the technology options for delivering the service are limited. Mesh technologies are dependent on condensed device deployment and are not practical for Insights+ which requires cellular communication. To mitigate cost due to data usage feeds data is transmitted only once per day. This limits the ability to deliver a more real-time experience to the customer and does not permit feature options like proactive notifications and real-time monitoring of appliances. Due to this, the team is now partnering with the Engineering department to test if there are ways to leverage investments in Network Strategy to enhance the capabilities of our Insights+ offer and lower the total cost of ownership in order to also address cost challenges. In addition, we are working with Itron to resolve the data issues customers are currently experiencing with inconsistencies in the timing of data populating.

3. Operations:

Operationally the introduction of these meters has introduced new complexities to the meter reading process. When the program first started meters were read manually and followed the Central Hudson's procedures for estimating the off-read months. Data was monitored to ensure that the information flow was reliable enough to automate the reads. After a year and a half it was decided to automate the reads in the estimated months so customers are now receiving actual reads each month. This automation process is working successfully and evaluation has begun on whether or not Insights+ can expand to all remote reads rather than continuing with manual reads per the existing meter reading schedules.

4. Cross-promotional and Cross-functional Opportunities Exist:

- a) The meters utilized for Insights+ can also be utilized for Value Stack customers and the new Voluntary Time of Use rate without any new metering programs or system changes required.
- b) Our Targeted Demand Response implementation program partner needed data for a statistically significant population of customers that were using direct load control devices rather than the thermostat control option. Utilizing Insights+ successfully satisfied their need and was less costly than the data logger required for direct load control devices. Because of this they were willing to cover the cost for the Insights+ subscription for the customer. The offer was then expanded to the Peak Perks Whole Home Generator program offering.

- c) The project team has been looking at existing partnerships, and new business models to see if an AMI meter provides additional value for the customer to view their energy savings and usage but have yet to successfully find an option that does not significantly drive up the program cost.
- 5. Data Visualization
 - a. The project team has identified multiple industry solutions that can further disaggregate usage data so that the customer can attribute usage to specific appliances. Plans to implement these solutions have been hindered by high prices, and lack of real time data due to the meters reporting on a day behind basis.
 - 6. New Revenue Streams
 - a. To date, there have not been any new market participants or proposals to expand onto Insights+.
 - 7. New Partnerships
 - a. Central Hudson continues to work independently and with REV Connect to explore new partnerships. The team has identified a number of potential candidates for Insights+ integration with plans to further research and develop in 2019.

D) Customer Feedback

Central Hudson recognizes that there is tremendous value in customer feedback in order to shape programs and improve the customer experience. It is critical to not just resolve a customer inquiry but to identify trends and analyze the implications.

Residential:

In Q4 feedback from customers centered on missing data intervals. The project team has communicated directly with customers and has met with the Contact Center, Simple Energy and Itron to further investigate the issues and find solutions. The team has issued refunds for over 20 monthly subscription fees to 10 customers due to data inconsistencies in Q4. This is a substantial number of occurrences of data issues considering the size of the customer population subscribing to Insights+ but also indicates that it is not systemic, i.e. it has not impacted the entire customer population. Regardless of the population impacted, these data issues are not something we can allow to continue.

Section 5: Financials

Redacted

Section 6: Risks, Opportunities and Mitigation Strategies

Table 7 details how we are expanding on our successes and creating action plans to improve in the areas where we are projecting to be off target.

Table 7: Action Items

Risk / Opportunity Category	Action Plan
<p>Opportunity – Brand Recognition</p> <p>Completion Date: On-going</p>	<p>Central Hudson is continuing with the build out of the CenHub product family, Inclusive of Insights+ into the online experience and future marketing plans. In preparation for 2018 we built a comprehensive marketing plan that includes outreach and education for our customers as well as internal employees. This effort is into 2019 and enhanced educational tools will be developed to assist customers in making the best product decisions, rate selection and heating fuel options for their lifestyle and circumstances.</p>
<p>Risk – CenHub My Account enrollment</p> <p>Projected Completion Date: On-going</p>	<p>Despite expanding marketing partnerships and product offerings a marked increase in CenHub enrollments has not occurred. Since the CenHub platform is the key delivery system for Insights and Insights+, maximizing enrollment rates is critical to program adoption. In 2019 alternate methods for customer account access and verification will be explored in order to further reduce friction in consumer engagement.</p>
<p>Risk – NYS Meter Approval</p> <p>Status: Mitigated</p>	<p>The Itron Centron OpenWay residential single-phase meter with Verizon 4G cellular card is not yet approved in New York State. Approval is being sponsored by National Grid. To mitigate this risk the team has worked with Itron and negotiated pricing of the polyphase OpenWay meter at the residential meter cost for the life of the Insights+ Demo project. Central Hudson continues to explore metering options with Itron and other meter vendors for potential future expansion of the program offerings.</p>
<p>Risk – Customer Engagement</p> <p>Projected Completion Date: On-going</p>	<p>Central Hudson continues to work with NYSERDA, REV Connect and other Utilities to prospect for new products and services that could appeal to Central Hudson’s customer base and enhance the Insights+ service offering.</p>
<p>Risk – Increasing Emphasis and Priority on Cyber Security</p>	<p>Protection of sensitive data is becoming ever more complex and the exposure risk both financially and optically to a company’s brand is growing. Central Hudson’s information technology group utilizes numerous tools and standards to protect our customers. Central Hudson has a robust vetting process for all vendors that share data with or use its platforms. In addition, protections are included in contract language. With the growing cost of cyber events, agreement on contract language is becoming increasingly difficult and resulting in prolonged timelines for contract negotiation. Work continues with the Legal Department, Enterprise Risk Committee and external research firms to explore partnership options and limit risk.</p>
<p>Opportunity - Utilization of Existing Data to Increase Enrollment and Platform Service Revenues</p>	<p>To date feature set within Insights+ has been limited to just the drill down of electric energy use. Market tools exist to layer on additional functionality or for export of data into supplementary apps. The team has yet to find ways to expand the feature set without driving up the subscription cost but exploration of the market and discussions with potential partners continues.</p>

<p>Risk - Inconsistencies in data population Projected Completion Date: Q3 2019</p>	<p>Customers have alerted Central Hudson to their Insights+ displays missing data intervals. Investigating the causes of the missing data with Itron and Simple Energy is a priority. In addition work continues with partners and IT to develop methods to alert us to missing data ahead of the customer reporting it so it can be proactively addressed.</p>
---	---

Appendix 1: Electric Heat Marketing Campaign



Receive pricing based on when you use electricity

Sign up for the [Insights+ and Time of Use Bundle](#). Get lower energy pricing during off-peak periods of the day and get Insights+ at the deeply-discounted price of \$1.99 when you enroll in [Time-of-Use billing](#). Watch the video above to learn more about both programs and then [opt-in to the bundle!](#)

VIDEO: TIME OF USE BILLING EXPLAINED



Bundle Time of Use Billing with an Insights+ subscription

Have you considered signing up for our [Insights+ and Time of Use Bundle](#)? With our Time of Use rate option you can potentially reduce charges by shifting your energy usage to off-peak periods of the day. With Insights+, you can view hourly and daily energy usage data to track how much energy your home uses when you're away, or if there is a particular time of the day when your usage tends to increase. With Insights+ you'll have the data to make smart choices about saving energy.

When you sign up for the Insights+ and Time of Use bundle, you'll receive Insights+ at the discounted price of \$1.99 per month. Watch the video above to learn more about both programs.

Electric Heat Customers:

Save up to \$150 per year with Time-of-Use rates





Heating season is a great time to switch to our Time-of-Use rate to save all year.

The idea behind Time-of-Use is simple. Some things cost more, or less, depending on when they are used. Movies cost less if you see them on Tuesday afternoons instead of Saturday nights. Air fares are cheaper when you fly on certain days. The price for electricity is no different. Demand for electricity is the highest during certain times of the day, driving up the price. But the good news is there are alternate hours of the day, called off-peak hours, when demand for electricity is lower, decreasing the price. **The better news is residential electric heat customers can save the most with this lower off-peak rate, when enrolled in our Time-of-Use program.**

Under this program, electric rates are lower than standard rates during off-peak hours, and higher than standard rates during peak hours. By managing the use of major appliances (e.g. washing machines, dryers, dishwashers, etc.) from peak to off-peak hours, along with setting your electric heat on a low setting during peak hours, savings can add up to \$150 per year.*

Peak hours are 2 p.m. - 7 p.m., Monday through Friday. Weekends and holidays are always off-peak.

For more information, or to enroll, go to: CentralHudson.com/TOU or call 845-452-2700.

BUNDLE

Combining Insights+ and Time-of-Use allows you to review your hourly energy history to help you remain on track toward your energy goals. Get Insights+ at the deeply discounted price of \$1.99 when you enroll in Time-of-Use: CenHubStore.com



*A minimum proportion of electricity use must take place during off-peak hours in order to save, as indicated at CentralHudson.com/TOU. Costs and savings will vary by household.

Heating season is a great time to switch to our Time-of-Use rate to save all year.

The idea behind Time-of-Use is simple. Some things cost more, or less, depending on when they are used. Movies cost less if you see them on Tuesday afternoons instead of Saturday nights. Air fares are cheaper when you fly on certain days. The price for electricity is no different. Demand for electricity is the highest during certain times of the day, driving up the price. But the good news is there are alternate hours of the day, called off-peak hours, when demand for electricity is lower, decreasing the price. **The better news is residential electric heat customers can save the most with this lower off-peak rate, when enrolled in our Time-of-Use program.**

Under the program, electric rates are lower than standard rates during off-peak hours, and higher than standard rates during peak hours. By managing the use of major appliances (e.g. washing machines, dryers, dishwashers, etc.) from peak to off-peak hours, along with setting your electric heat on a low setting during peak hours, savings can add up to \$150 per year*. Peak hours are 2 p.m. - 7 p.m., Monday through Friday. Weekends and holidays are always off-peak.

For more information, or to enroll, go to: CentralHudson.com/TOU or call (845) 452-2700

BUNDLE

Combining Insights+ and Time-of-Use allows you to review your hourly energy history to help you remain on track toward your energy goals. Get Insights+ at the deeply discounted price of \$1.99 when you enroll in Time-of-Use: CenHubStore.com

*A minimum proportion of electricity use must take place during off-peak hours in order to save, as indicated at CentralHudson.com/TOU. Costs and savings will vary by household.



Report Attachment 1: Insights+ Incremental O&M

