ATTACHMENT A
INITIAL QUESTIONS RELATED TO THIRD-PARTY IMPLEMENTATION OF THREE PILOT PROGRAMS

The following questions are directed at Public Service Company of Colorado and other interested persons regarding the development and implementation of requests for proposals (RFPs) for third-party implementation of three pilot programs: (1) virtual power plants (VPPs); (2) natural gas demand response (DR); and (3) neighborhood electrification.

VPP Pilot Questions

1. Given the Commission's interest in quickly and fully understanding the potential capabilities, reliability and costs associated with VPPs, we have expressed an interest in an RFP targeted at third-parties. As it relates to third-party involvement with VPPs, please identify the following:

   - Any example structures in vertically integrated electricity markets where third-party VPP providers have provided services, including any details known about the arrangement.
   - Additional information about limitations as to who can aggregate certain types of distributed energy resources (DERs)? For example, identify any proprietary concerns with dispatch of mainstream manufacturers of DERs.
   - Are there significant challenges related to utilizing a third-party VPP provider in a vertically integrated electricity market? Are there specific methods to overcome these challenges?

- What specific customer data would need to be shared among a third-party VPP provider and a vertically integrated electric provider, at what part of the process must it be shared and are there any examples to look to for proper execution of this data sharing, taking into consideration customer data privacy concerns.
- How do utility programs interact with contracted third parties - are there roles that are better for the utility and others that are better for third parties?

2. What programs could utilities develop today that could utilize distributed resources already installed today, versus what programs are best to opt-in new devices installed going forward?
3. What is a reasonable customer acquisition and implementation timeline to move from contracting to having a functioning VPP?
4. Should the RFP set minimum requirements as to what resources be included in a VPP pilot? What is an optimal mix of resources in a VPP for different purposes and what different services or particular benefits can different types of DERs provide?
5. Should the RFP consider minimum requirements related to the type, cost or objectives related to events in which the VPP is compensated to activate?
6. Should the RFP identify any minimum criteria or expectations as it relates to the arrangement between a VPP and retail customers - in terms of transparency, compensation, etc.?
7. Should the RFP include specific language that would allow for scalability of the VPP program following the end of the pilot phase?

8. Are there best practice examples to look to for understanding the best methods for performance tracking, measurement and verification? Specifically, should different measurement and verification for efficiency vs direct dispatch type of resources be considered?

9. Are there examples of calculations to determine the value of VPP dispatch under different conditions?

10. What are reasonable compensation schemes for customers participating in VPPs in vertically integrated electric markets and what, if any, parameters should be set around compensation guidelines or boundaries? How should a VPP pilot program structure customer compensation mechanisms to maximize participation and maximize benefits?

11. What data is publicly available or could be made available from the incumbent utility regarding the location of existing EVs, smart thermostats, smart hot water heaters, solar PV + storage systems throughout the distribution system? Is there an available best practice to reference in how this information can or should be shared with third-party service providers?

12. Is there a reasonable estimate of how much VPP capacity and energy is on the grid (Public Service's service territory today), what kinds of DERs are on the distribution grid, and what DERs are readily able to be aggregated?

13. What are the capabilities of advanced metering infrastructure (AMI), as it relates to tracking performance or interfacing either between a customer and VPP provider or the VPP provider and the utility?

14. What due diligence should be done on third-party VPP bidders to ensure only reputable entities are marketing to customers as part of VPP program customer protection?

15. What criteria should be used to assess performance (performance criteria) and how is that information available?

16. During the pilot, what data and at what frequency should be required for ongoing reporting?

17. At the conclusion of the pilot, what specific data should be presented?

18. Please articulate any objectives that should identified specific to the VPP pilot.

Gas Demand Response Pilot Questions

1. Please provide examples of any known gas demand response pilots or programs at other utilities and as much detail as possible about the structure, duration, cost and results achieved by those programs.
2. What is a reasonable customer acquisition period that should be assumed for development of a gas DR pilot?
3. Should a specific number of events be required to be called per month or per winter to test the results of a pilot gas DR program?
4. Should a specific duration of events (in hours) be required for called gas DR events?
5. Should the RFP establish requirements or guidance around the payment structure between a gas utility and a gas DR provider for a gas DR pilot? If so, what aspects should be part of a successful compensation model, which encourages performance that can reliably reduce gas throughput during peak usage events?
6. Should the RFP establish minimum standards about what technologies should be included in a gas DR pilot?
7. Should the RFP set requirements around the size of the pilot in terms of either a Dth peak reduction target or # of customers participating? If so, what is the proper benchmark and why?
8. Should the RFP require the gas DR pilot to occur in a portion of the system that is either currently or is projected to be capacity-constrained?
9. Should the RFP provide any guidance on the geographic location, makeup or diversity of the participants recruited for the pilot?

10. Should the RFP provide any guidance on the type of building, floor areas, ages, mechanical system types or other participant requirements in terms of who should be targeted for the gas DR pilot and what diversity of features should be included?

11. How should the RFP process consider access to benefits for DI communities as it relates to specific RFP requirements for a gas DR pilot?

12. During the pilot, what data and at what frequency is necessary require for ongoing reporting?

13. At the conclusion of the pilot, what specific data should be presented?

14. Please articulate any objectives that should be identified specific to the gas DR pilot.

Neighborhood Electrification Pilot Questions

1. In Proceeding No. 23A-0309EG, the Commission discussed with Public Service and the parties a neighborhood electrification pilot, targeting a disproportionately impacted (DI) community in a capacity constrained area in the Company's gas utility service area. In Public Service's Clean Heat Plan recently submitted in Proceeding No. 23A-0392EG, Hearing Exhibit 101, Attachment JWI-3, the Company presents a memorandum of understanding (MOU) for a Neighborhood Residential Market Transformation Project. However, Decision No. C23-0413 contemplates third-party implemented programs. Does inclusion of the neighborhood electrification concept as an RFP in accordance with Decision No. C23-0413 still serve as a helpful process in allowing the Commission and stakeholders to better understand the capabilities and costs specifically associated with a third-party provider of these services?

2. Please provide examples of any known neighborhood electrification pilots or programs at other utilities and as much detail as possible about the structure, duration, cost and results achieved by those programs.

3. What is a reasonable customer acquisition period that should be assumed for development of a neighborhood electrification pilot?

4. Should the RFP target an area of the gas system which is currently or is soon to be capacity-constrained in which to conduct the pilot?

    - If the pilot is targeted in a demand-constrained area should a requirement of participation be the removal of gas backup heating equipment?

5. Should the RFP target a DI community in which to conduct the pilot?

6. Should the RFP include a partnership component with the federal weatherization program for equipment replacement targeting houses in neighborhoods primarily inhabited by low-income residents?

7. Should the RFP consider minimum standards about what equipment types and efficiencies should be included in the neighborhood electrification pilot?

8. Should the RFP set requirements around the size of the pilot in terms of either a Dth peak reduction target or number of customers participating? If so, what is the proper benchmark and why?

9. Should the RFP provide any guidance on the geographic location, makeup or diversity of the participants recruited for the pilot?

10. Should the RFP provide any guidance on the type of building, floor areas, ages, mechanical system types or other participant requirements in terms of the homes and buildings

participating in the neighborhood electrification pilot and what diversity of features should be included?

11. How should the RFP consider access to benefits for DI communities as it relates to specific RFP requirements for a neighborhood electrification pilot?

12. How should the RFP consider future participation by the homes and buildings in the neighborhood electrification pilot in a virtual power plant?

13. During the pilot, what data and at what frequency should be required for ongoing reporting?

14. At the conclusion of the pilot, what specific data should be presented?

15. Please articulate any objectives that should be identified specific to the neighborhood electrification pilot.