

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF COLORADO

PROCEEDING NO. 16A-0588E

IN THE MATTER OF THE APPLICATION OF PUBLIC SERVICE COMPANY OF COLORADO FOR AN ORDER GRANTING A CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY FOR DISTRIBUTION GRID ENHANCEMENTS, INCLUDING ADVANCED METERING AND INTEGRATED VOLT-VAR OPTIMIZATION INFRASTRUCTURE.

COMMISSION DECISION DENYING MOTION AND ORDERING A NEW APPLICATION

Mailed Date: March 19, 2021
Adopted Date: March 10, 2021

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I. BY THE COMMISSION

A. Statement

1. On December 23, 2020, Mission:data Coalition (Mission:data) filed a motion to:
1) reopen Public Service Company of Colorado’s (Public Service or Company) Advanced Grid Initiative and Security (AGIS) proceeding (Proceeding No. 16A-0588E) due to new technology functionalities in the meter that were not approved within the scope of the AGIS CPCN; 2) reopen and join the Home Area Network (HAN) proceeding (Proceeding No. 18A-0194E) with the reopened AGIS proceeding (Proceeding No. 16A-0588E); 3) set a procedural schedule; 4) extend

the deadline for filing responses to the instant motion by seven days; and 5) issue an order temporarily prohibiting Public Service from deploying certain advanced meter computer software applications.

2. The Commission denies Mission:data's motion. However, we agree with Mission:data and other parties that more investigation of the new technology investments is needed. We believe that the path set forth by the Trial Staff of the Public Utilities Commission (Staff) will allow the Commission to determine how best to address the issues raised by Mission:data's motion. To that end, we order Public Service to file an application to amend its AGIS Certificate of Public Convenience and Necessity (CPCN).

B. Background

3. Proceeding No. 16A-0588E and Proceeding No. 18A-0194E relate to Public Service's advanced meters. In Proceeding No. 16A-0588E, through Decision No. C17-0556, issued July 25, 2017, the Commission approved an Unopposed Settlement (Settlement Agreement) and granted Public Service's application seeking a CPCN, as modified by the Settlement Agreement, for implementation of certain distribution grid enhancements. In Proceeding No. 18A-0194E, through Decision No. R18-0590, the Commission approved the unopposed and uncontested application.

4. On December 23, 2020, Mission:data filed its Motion to Reopen, Join Proceedings, Establish a Procedural Schedule, Extend the Deadline for Filings Responses, and for an Order Prohibiting Public Service Company of Colorado From Temporarily Deploying Certain Advanced Meter Software Applications. The Commission extended the deadline to respond to Mission:data's motion on January 7, 2021.

5. Public Service and WRA filed separate responses to Mission:data's motion and also filed a joint response. Staff filed a response to the motion, as well. As relevant here, the parties disagree on the procedural path the Commission should take to examine some of the questions that Mission:data's motion raises. Mission:data, Public Service/WRA's joint response, and Staff each suggest different approaches.

6. On January 26, 2021, Public Service and WRA filed a Motion for Leave to Reply and Reply to Trial Staff of the Colorado Public Utilities Commission's Response. The Proposed Reply in large part addresses Staff's proposed procedural approach and the Motion argues that Commission Rules allow one non-moving party to reply to another non-moving party's response to a third party's motion.

7. On February 9, 2021, Mission:data and Staff each responded to the Public Service/WRA joint motion for leave to reply. Both argued that the motion for leave to reply is unusual and improper under Commission Rules.

8. On February 19, 2021, the Commission granted Public Service and WRA's Motion for Leave to Reply.

1. Proceeding No. 16A-0588 AGIS CPCN

9. On August 2, 2016, Public Service filed an application seeking a CPCN for the AGIS initiative. The Company sought a CPCN for investments in advanced metering infrastructure (AMI), Integrated Volt-VAr Optimization infrastructure (IVVO) and related information technology and other networking investments, totaling \$612 million. On May 8, 2017, a Joint Motion to Approve the Unopposed Comprehensive Settlement Agreement was filed by the Company and the parties to Proceeding No. 16A-0588E. The City of Boulder was the sole party not joining and did not oppose the settlement agreement. On June 21, 2017, the Commission

issued Decision No. C17-0556, approving the AGIS Settlement with clarifications and granting the CPCN.

10. The AGIS Settlement, approved in the AGIS Order, describes several improvements to the Company's distribution system: AMI meters that measure and transmit distribution system information (*e.g.*, voltage and current) to more efficiently manage the distribution grid; IVVO using the advanced meters as sensors; and providing certain kinds of energy usage data to customers and customer-authorized third parties. The energy usage data originally described in the Company's AGIS testimony was five-minute or 15-minute usage data, to be made available via Green Button Connect My Data (GBC) according to the AGIS Settlement; and real-time usage data, approximately every seven seconds, to be made available from the advanced meter via the Home Area Network (HAN). Neither the AGIS Settlement nor the Company's testimony envisioned "Distributed Intelligence" capabilities, further described below, in which advanced meters would have a computer capable of running software applications or "apps" deployed through an "App Store" that can measure and analyze energy, voltage and current up to thousands of times per second.

11. Under the AGIS Settlement, the Company was required to file a subsequent application setting forth an implementation plan for the HAN. The HAN allows customers' devices such as in-home displays or internet gateways to receive real-time electric usage information broadcast from their smart meter over a radio signal. The AGIS Settlement also required the Company to consider the specifics of the HAN, including "The communication protocols utilized, how they do or do not promote easy data access by customers and energy service providers and why they were chosen."

2. Proceeding No. 18A-0194E HAN Application

12. On March 30, 2018, the Company detailed its HAN approach in Proceeding No. 18A-0194E. Commission Decision No. R18-0590 approved the uncontested HAN application. Public Service stated Zigbee Smart Energy Profile 1.1 was selected as the communication protocol for the HAN radio to serve customer-provided devices. Zigbee SEP 1.1 is much simpler than the wide array of internet communications traffic with which consumers are familiar; it is quite limited, carrying only a few pieces of read-only energy usage data. One of the stated reasons Public Service selected Zigbee SEP 1.1 was to align with the most widely used communication protocol used by other utilities across the United States and supported by device manufacturers.

3. Material changes to AGIS CPCN

13. On May 31, 2019, the Company filed its CPCN Annual Actuals Report for 2018 in the AGIS Proceeding. In this filing, the Company provided its first public notice to the Commission that there would be materially changed technology capabilities within the advanced meters and delays in the ordered deployment schedule.

14. On October 31, 2019, the Company filed the CPCN Annual Forecast Report for 2020 stating that changes to the AGIS Settlement would be necessary. Deployment deadlines within the AGIS Settlement, including HAN and Green Button Connect My Data availability, would be pushed from 2020 to 2021. This delay impacts the customer's ability to enable third party energy management companies to access the customer's energy usage data, thereby retarding an important benefit of Public Service's smart meter investment. At the time, the Company affirmed its commitment to abide by the HAN order in Decision No. R18-0590 regarding the communications protocol, Zigbee SEP 1.1.18. However, the Company mentioned a new technology, "Distributed Intelligence":

In mid to late 2018, Company became aware of new, advanced grid edge computing capabilities, called Distributed Intelligence (DI) being planned, developed, and offered by some AMI meter manufacturers. DI capabilities became a major focus for the Company's AMI meter evaluation due to the potential for advanced customer facing, operational and other future proofing capabilities that DI could offer. As a result, the company solicited new information from a shortlist of suppliers for AMI meters with DI capabilities. An AMI meter contract was signed in August 2019.

15. Itron, the Company's selected meter vendor, began offering new, more advanced meters that contain a computer. This computer can run advanced software applications which can be developed by any entity, whether Itron, the Company, or third parties. It is this computer and its ability to run apps, referred to by Itron as DI, that was not contemplated nor approved in the AGIS Order or AGIS Settlement.

16. On March 22, 2020, the Commission issued Decision No. C20-0170 granting Mission: data and WRA the ability to view, under an extraordinary, highly confidential protective order, the agreement between Xcel Energy and Itron.

17. On July 17, 2020, the Company filed to revise its No. 8 Electric Tariff to implement an Advanced Grid Rider, Proceeding No. 20AL-0301E, to recover costs for the AGIS projects, including AMI. The AGR Advice Letter described in greater detail the changes to the AGIS Settlement and changes to the meters that are underway. For example, testimony of the Company confirmed that the Company intends to unilaterally postpone Green Button Connect My Data implementation from 2020 to 2021; modify the HAN communication protocol from Zigbee SEP 1.1 to Wi-Fi, further described below; and introduce DI capabilities not within the scope of the AGIS CPCN ("...this DI capability allows for the installation of applications on the meter -- similar to how applications are installed on a smart phone"). The OCC's Motion to Dismiss the AGR Advice Letter proceeding was granted on October 29, 2020 in Decision No. R20-0754, in which the Administrative Law Judge concluded that the AGR was a collateral attack on the AGIS

Settlement because the AGIS Settlement only contemplated cost recovery in a base rate proceeding, not a rider.

4. Motion to Reopen

18. In its December 23, 2020 motion, Mission:data states that these new technologies implicate public policy goals such as protecting and realizing consumer benefits, allocating the inherent value of customers' energy usage data among various stakeholders, and supporting economic and environmental goals. Mission:data argues the timing is ripe for the Commission and stakeholders to evaluate the enormous potential of these new technologies and ensure transparency between regulated and unregulated functions.

19. Mission:data also argues that DI capabilities themselves include significant public policy implications, including ratepayer benefits and risks. For example, benefits include Public Service installing utility-facing apps to diagnose problems such as voltage issues or broken neutral lines, or customers installing their own apps that could provide tailored energy efficiency recommendations to customers based upon highly detailed AMI and DI capabilities. These additional capabilities also come with risks, such as ratepayers not receiving the full benefit of their energy use information, or substantially limiting customer choices for competitive DER products and services by excluding independent DER providers from using DI capabilities.

20. Mission:data states that Itron markets its "App Store" functionality as allowing utilities to deploy apps made by any entity onto AMI meters. The apps "have access to the meter's data, implement algorithms, and then send the results of these computations to a backend server for further analysis and/or display." Highly detailed power, voltage and current information analyzed on the meter is extremely valuable to help customers better understand and manage their monthly bills; the potential for energy efficiency and demand response benefits from DI and highly

granular data is quite significant. Itron has announced that it is working with numerous entities of its choosing to develop apps for several purposes, one of which is to disaggregate electricity usage measured at the meter thousands of times per second into the usage of individual devices and appliances.

21. Mission:data believes the ability for customers to select a software app from a competitive DER marketplace, much like through a mobile device's "App Store" today, could enable innovation in energy management, support time-shifting of usage, and significantly enhance the customer experience. These insights into energy usage can be used to target and prequalify customers for efficiency offerings that are specific to their home – for example, customers could be informed if they have a specific brand of window-mounted air conditioner that is aging and particularly inefficient.

22. Mission:data argues there are significant economic and market benefits and risks as the AGIS Settlement was approved by the Commission in part because customers would be able to have their energy information (at the time, envisioned as five- or 15-minute usage via GBC or seven-second usage via the HAN) transferred to third parties, consistent with Commission Rule 3027. According to the AGIS Order, third parties such as DERs could "enhance the customer experience and provide benefits to both the customer and the distribution system." Mission:data argues utility customers' energy usage data at high granularity has great market value, yet to be unlocked.

23. Mission:data also argues that third party DER providers, who provide products and services such as rooftop solar, battery storage, behavioral demand response, home energy management systems, and smart consumer devices could have the energy-saving potential of their products and services severely diminished by Public Service retaining exclusive access to the

meter-based App Store. Additionally, Public Service has the capability with DI to undercut DER providers by only making available inferior five-minute or 15-minute usage data while retaining the highly detailed, kilohertz-level appliance analysis for itself.

24. Mission:data states that given the Company's substantial deviations from the AGIS Settlement, the near irreversibility of installed smart meters over their 20-year useful life, and a novel technology – DI capabilities – about which the Commission lacks even the most basic information, good cause exists to reopen these proceedings in order to consider a revision to the AGIS CPCN, or a new CPCN, for the DI capabilities and App Store. It believes that the Commission is well-poised to consider ratepayer and market exposure to the new benefits and risks.

25. Mission:data also requests the Commission join the HAN proceeding with the AGIS Proceeding. Mission:data argues that; 1) Public Service has unilaterally chosen a new, non-Commission-approved HAN technology, and is moving forward with AMI meters that incorporate the non-approved technology; 2) there are significant interrelated public policy questions about the new HAN technology that could be simultaneously addressed in an administratively efficient manner with AGIS discovery and testimony, such as: whether Public Service should be able use their software apps to control customer devices; whether the new HAN technology is widely used and supported by a sufficient number of hardware and software makers to benefit customers and whether the process for customer activation of the new HAN technology meets the objectives of the AGIS Order to provide customers with easy-to-use options for managing energy use; and 3) HAN and DI capabilities are technologically and inextricably linked, meaning that it would be impractical and inefficient to consider the HAN separately from the AGIS CPCN.

26. Mission:data states that discovery and testimony are necessary to bring critical facts about the Company's plans to light and establish easy competitor access to the App Store and appropriate regulatory treatment of DI. Mission:data argues re-opening both proceedings is fundamentally necessary for appropriate Commission oversight of the DI computing capabilities of the AMI meters. It also states that the reopened AGIS CPCN proceeding should consider whether a new or modified CPCN is required, and that the reopened HAN proceeding should consider whether a new application, amended application, or variance is appropriate.

27. Finally, Mission:data requests the Commission issue an order temporarily prohibiting Public Service from deploying certain non-CPCN software apps, as defined below, on AMI meters due to the risk of irreparable anti-competitive harm to third party DER providers, and to enhance and protect other public policy interests. Mission:data believes such an order should remain in effect until a subsequent Commission order is issued in the combined proceedings that establishes adequate consumer and economic protections against anticompetitive activity.

28. In its response to Mission:data's motion, Public Service requests that the Commission deny the requested relief within the Motion, as the remedy being proposed within the Motion is unnecessary. Along with WRA, the Company believes the framework set forth in their Memorandum of Understanding (MOU) provides a three-pronged pathway that addresses some of the issues raised by the Motion without the drastic remedy of reopening the previous proceedings. Public Service argues the MOU is a constructive solution that is the product of significant collaboration and negotiation; further, it avoids any potential delay in meter deployment while a future application is adjudicated by the Commission regarding additional capabilities of the advanced metering technology that Company has procured. Public Service urges the Commission to consider the merits of the MOU framework in its analysis of Mission:data's Motion.

29. Public Service believes all business decisions made by the Company concerning meter technological modifications or upgrades are within the scope of the Settlement and Decision No. R18-0590 within Proceeding No. 18A-0194E. First, the Company's selection of the RIVA 4.2 meter is consistent with the AMI requirements within the AGIS Settlement. Second, the upgrade to Wi-Fi radio and IEEE 2030.5 communications protocol is consistent with the Settlement and Decision No. R18-0590 which allow for future proofing. Third, Public Service argues the commitment to provide customers and third parties with access to customer energy data within the Settlement has not changed.

30. The Company also argues that prohibiting deployment of certain Distributed Intelligence capabilities of the AMI meters will compromise cybersecurity measures and adversely impact deliverables under the Settlement and other proceedings. Additionally, Public Service argues that combining Proceeding Nos. 16A-0588E and 18A-0194E is in direct conflict with the plain language within the Settlement.

31. WRA supports Mission:data's request for Commission oversight of the roll-out of next-generation metering capabilities, including DI and the App Store. However, WRA disagrees with the procedural remedy sought in the Motion, arguing that a return to reopening of the AGIS and HAN proceedings is not the best pathway to achieve this goal. WRA believes that the alternative procedural pathway detailed in its Joint Response and MOU will allow this Commission to address the concerns raised by Mission:data without reopening the AGIS CPCN and HAN proceedings.

32. WRA argues that adopting the MOU approach will ensure that the issues raised by Mission:data are considered in a fully litigated proceeding, initiated with direct testimony by the Company and adhering to the scope defined in the MOU, and will provide the opportunity for

parties to conduct discovery and put forward evidence. The MOU approach also offers a forum, through the new proceeding contemplated by the MOU, to “initiate Commission review of the terms of use of the DI capabilities and App Store, including Company revenues from the App Store and/or software deployed through the App Store or the new meters, which were not originally contemplated as a part of the AGIS or HAN proceedings.”

33. Staff states that since first learning of the Company’s selection of DI meters, and later, of Mission:data’s concerns about them, Staff has exerted its best efforts to gather information from the Company about this new technology and the Company’s plans for it. Staff states that Public Service has not fully cooperated in that process.

34. Staff argues that the Commission must fully understand and properly regulate the Company’s implementation of DI Meters. Specifically, the Commission should set in motion a pathway to carefully inspect the Company’s actions by ordering Public Service to file an application to amend the AGIS CPCN in a new proceeding. That way, all interested stakeholders (including those who did not participate in the original AGIS and HAN proceedings but may wish to now) can assess the capabilities of the Company’s DI Meters and address the financial implications of them. Staff argues that the DI Meters are substantially different than the meters contemplated when the Commission issued the original CPCN. The AGIS CPCN only contemplated the basic components of AMI Meters and Public Service’s decision to purchase and deploy DI meters goes beyond what was contemplated and approved in the AGIS CPCN and the HAN Order. The Commission must investigate the Company’s actions and establish appropriate regulatory guardrails to protect ratepayers.

35. Staff recommends that the Commission open a new proceeding to determine how best to amend the AGIS CPCN. Staff also recommends that the Commission should include a list

of specific issues that the Company should propose as a starting point for updating the CPCN, including:

- a) updating the AMI meter deployment schedule to reflect the reality that the Company hasn't yet deployed a single non-IVVO meter;
- b) establishing regulatory guardrails on DI capabilities, the use of data generated from DI, and related issues;
- c) a resolution to the HAN Zigbee radio issue;
- d) appropriate modifications to AGIS cost recovery;
- e) improvements to reporting; and
- f) other such related issues arising from the deployment of the DI Meters in lieu of the meters that the Parties and the Commission contemplated in the 2017 settlement.

36. Staff believes the Commission should reject the procedural pathway outlined in the MOU presented by WRA and the Company because it does not permit amendments to the CPCN. Staff's procedural pathway, by allowing amendments to the CPCN via a separate proceeding, permits the Commission to consider these and other important questions arising from the Company's decision to unilaterally adopt DI Meters as part of its AGIS implementation

37. Staff states that a new proceeding could occur while the Company simultaneously begins to deploy the DI Meters but with the DI technology disabled (*i.e.*, turned off) until the Commission issues a final decision on how best to amend the AGIS CPCN. Staff does not believe the Company plans to begin deploying the DI Meters until the second half of 2021, at a much slower pace than in 2022 through 2024. If the Commission acts quickly to initiate a new proceeding, a final decision could be in place by Fall 2021 (or earlier if the parties reach an amicable resolution after testimony and discovery). To the extent a new proceeding causes increased cost recovery risk to the Company, Staff argues the Company created that risk by taking unilateral actions that require Commission attention in this case.

38. In their Reply to Staff's Response, WRA and Public Service argue that contrary to Staff's proposal of combining both prior proceedings into one new proceeding without providing clear parameters, the MOU sets forth a detailed scope of the DI Application filing, including explicit parameters for AMI meter use during the pendency of the proceeding. Staff's Response offers a more complicated proposal, which requires that the Commission order the Company to file an application to amend the AGIS CPCN in a new proceeding.

39. Public Service and WRA state several concerns with Staff's proposal, arguing it lacks clear parameters concerning which elements of the original AGIS CPCN would be revisited in the new proceeding and it has the potential to adversely impact AMI meter deployment in the interim. Specifically, if the Commission were to order the parties to effectively relitigate the AGIS CPCN within a new proceeding the AMI deployment schedule may be delayed up to two years if Commission-approved cost recovery is revisited as part of this proceeding.

40. In its Response to the Public Service and WRA's Motion for Leave to Reply, eStaff asserts that the Reply mischaracterizes much of what Staff argued in its Response. First, Staff does not want to relitigate the issues resolved in the AGIS Settlement—rather, DI capabilities warrant a closer look and a measured regulatory approach. Staff argues that none of the intervenors—nor the Commission—evaluated DI Meters in the AGIS and HAN proceedings, and they must have the chance to do so now. Second, Staff does not believe further delay of the AMI meter rollout will be necessary. The already delayed meter rollout, the April 2022 implementation of Time of Use rates, and general agreement regarding the need for AMI meters allows the Commission sufficient flexibility to address the novel DI functionality. Staff states it intentionally drafted its proposed procedural pathway to avoid creating a delay in the rollout of AMI meters.

C. Discussion and Findings

41. We agree with all parties that more information on these new technology investments such as Distributed Intelligence is needed. Public Service is an early adopter of DI technology, and a subsequent proceeding is likely to raise complex regulatory issues associated with new revenue streams and the creation of consumer-focused energy apps that use potentially granular usage data. We do not believe that this investigation would be best-positioned to occur in a proceeding that is now five years old, as Mission:data requested—new notice and opportunity to intervene is warranted as other parties may be interested in the issues raised by the Motion.

42. We believe it is important for the Commission to understand how the highly detailed AMI and DI capabilities benefits both the utilities and the customer. We are concerned that the new technology pursued by Public Service may substantially limit customer choices for competitive DER products and services by excluding independent DER providers from using DI capabilities. We agree with Mission:data that DI capabilities and the associated “App Store” raise public policy questions about the expansion of Public Service’s monopoly into unregulated arenas. Ratepayers are expected to pay for the meters and the associated technology investments, but Public Service has not demonstrated how to manage the incentives and risks associated with ratepayers funding unregulated functions and revenue streams such as the utility having the sole control over the “App Store.”

43. Mission:data, Staff, and Public Service and WRA set forth different pathways for investigating these new technologies. We share the concerns of the Public Service and WRA that the Commission should not further delay the roll-out of the AMI meters. While the Joint MOU lays out likely the quickest path to resolution by limiting the scope of a new proceeding, we have procedural concerns that it does not permit amendments to the CPCN, which may be an important

tool for the Commission to ensure ratepayers are protected by new AGIS investments, as well as making sure third party DER and other technology providers are not unfairly prohibited by Public Service who may retain exclusive access to the meter-based App Store. And, a bifurcated approach, like the one proposed in the MOU, will likely be inefficient because many of the same issues would have to be simultaneously addressed in both proceedings.

44. We believe that the path set forth by Staff will allow the Commission to thoroughly address the issues raised by Mission:data's motion. We agree that allowing amendments to the CPCN via a separate proceeding will permit the Commission to consider questions arising from the Company's decision to unilaterally adopt DI Meters as part of its AGIS implementation. By limiting the areas of inquiry to the new facets of the meters (as Staff suggests), the Commission can avoid litigating settled issues and ensure that the proceeding is streamlined as much as possible.

45. Staff's procedural approach will allow the Commission the greatest level of authority should it desire to set terms and conditions around Public Service's ongoing AMI roll-out. While the proposal by Public Service and WRA includes a useful characterization of issues at hand—such as how Public Service will allow third-party application developers the ability to engage with customers using the App Store—we are concerned that the authority the Commission would have to enforce results under that application is somewhat unclear. In contrast, Staff proposes amending the CPCN which the Commission previously approved. Generally speaking, the granting of a CPCN creates a rebuttable presumption that the Company may recover costs associated with CPCN projects in a subsequent base rate case. Were the CPCN amended to include terms and conditions regarding DI capabilities, then it would increase the Commission's ability to ensure that Public Service delivers on the promises of evolving technology through the mechanism of a subsequent rate case.

46. In response to concerns regarding delay of meter roll-outs, Staff points out that a new proceeding could occur while the Company simultaneously begins to deploy the DI Meters but with the DI technology disabled (*i.e.*, turned off) until the Commission issues a final decision on how best to amend the AGIS CPCN. Staff also points out that the Company plans to begin deploying the DI Meters in the second half of 2021, at a much slower pace than in 2022 through 2024.

47. We acknowledge Public Service's concern that revisiting prudence could lead to uncertainty regarding the AMI roll-out, which represents a significant expense. However, as we discussed above, DI capabilities likely represent a new evolution of technology that raises new regulatory issues that we do not believe were fully evaluated in the prior proceedings. Consistent with Staff's position, we wish to see a targeted reexamination of the regulatory issues raised by Public Service's change to DI-capable meters.

48. We therefore deny Mission:data's motion and instead order Public Service to file a new application to amend its CPCN, including both AMI and HAN elements. The application must include: 1) updating the AMI meter deployment schedule to reflect the reality that the Company hasn't yet deployed a single non-IVVO meter; 2) a description of the DI capabilities and proposals for regulatory treatment of DI and the App Store, as further described below, as well as the value proposition for DI; 3) an explanation of how the Company's selection of a Wi-Fi-based HAN is consistent with the requirements of the AGIS Settlement and AGIS Order; 4) appropriate modifications to AGIS cost recovery, given the potential for revenue streams resulting from DI Meters and the App Store; 5) improvements to reporting; and 6) other such related issues arising from the deployment of the DI Meters in lieu of the meters that the Parties and the Commission contemplated back in 2017.

49. As the Joint Parties describe in the MOU, the Company agrees to explain in its application the potential value that the new capabilities of the meters bring to both customers and the Company and how these capabilities will be developed. The Company shall include in its direct case a discussion about how the App Store will be managed by the Company and/or its partners or vendors, and how it will be used by customers and third parties. The application should specifically address open, non-discriminatory access to DI capabilities and the App Store for third parties; customer access to the HAN, DI capabilities, and the App Store; any additional processes for customer access to energy data and transfer to third parties, including but not limited to the status of Green Button Connect implementation; terms of use; and the conditions under which Public Service may deploy apps beyond those necessary to provide base services, as described below. Based on Mission:data's recommended scope for the proceeding, we also expect this information from the Company will allow the Commission to investigate how the Company can establish easy-to-use, fair, reasonable and non-discriminatory access to, and use of, the DI App Store by customers and competitive third parties, providing the greatest benefits to ratepayers, and expanded options for customers to choose DER providers.

50. As described by the Joint Parties in the MOU, we direct Public Service to not "turn on" or utilize the DI functionality except as necessary to provide base services¹ until the separate application is resolved.

¹ The MOU defines "base services" as follows: "customer billing service; IVVO functionality; HAN connectivity w/ kW & kWh reads; usage information consistent with the RE-TOU Settlement Agreement (i.e., displaying usage information in Time of Use periods); energy analysis against peers (e.g., neighbor comparisons consistent using monthly data, with data provided to customers today); services as necessary to support implementation of the Transportation Electrification Plan, including approved pilot programs; safety services such as detecting unusual power patterns; and grid facing solutions that are focused on improving the reliability, safety or cost of delivering power. These solutions could include potential applications such as power theft detection, power quality analysis, secondary equipment assurance, and transformer load management." MOU, at 3 (Section III). The MOU further provides that "[w]hile these base services may be dependent upon customer-side end use load disaggregation; the Company will not provide any load disaggregation information analysis to customers beyond the

II. ORDER

A. It Is Ordered That:

1. The December 23, 2020, Motion to Reopen, Join Proceedings, Establish a Procedural Schedule, Extend the Deadline for Filings Responses, and for an Order Prohibiting Public Service Company of Colorado From Temporarily Deploying Certain Advanced Meter Software Applications filed by Mission:data Coalition is denied.

2. Public Service Company of Colorado is ordered to file an application to amend its Advanced Grid Initiative and Security Certificate of Public Convenience and Necessity, consistent with the discussion above.

3. Public Service Company of Colorado is ordered not to enable the Distributed Intelligence functions in any installed advanced meters until further order of the Commission.

4. This Decision is effective upon its Mailed Date.

granularity of load disaggregation information available today until a resolution is reached regarding these matters beyond the base services identified above.” MOU, at p. 3 (Section III).

**B. ADOPTED IN COMMISSIONERS' WEEKLY MEETING
March 10, 2021.**

(S E A L)



ATTEST: A TRUE COPY

A handwritten signature in cursive script that reads "Doug Dean".

Doug Dean,
Director

THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF COLORADO

ERIC BLANK

JOHN GAVAN

MEGAN GILMAN

Commissioners