

June 5, 2024

Andrew S. Johnston, Executive Secretary
Maryland Public Service Commission
6 St. Paul Street, 16th Floor
Baltimore, Maryland 21202

Re.: Case No. 9665 – Comments on PC44 Distribution System Planning Work Group Final Report

Dear Mr. Johnston:

The undersigned parties hereby submit these comments on the Final Report of the PC44 Distribution System Planning Work Group in response to the Commission’s Notice of Invitation to Comment issued on May 1, 2024. Representatives of the Chesapeake Physicians for Social Responsibility, Coalition for Community Solar Access, Paul Verchinski, and the Sierra Club (the “Joint Commenters”) have been regular and active members of this Work Group (WG); and have also been regular and active participants in other related Commission Work Groups, including the Interconnection, Electrification, and Community Solar WGs.

The Final Report itself, along with the attached materials, provides the Commission with substantial documentation of the deliberations, positions, and – where achieved – points of consensus coming from the WG’s work during Phase 2 of the process, which was established by Commission Order 90777.

We appreciate and support the report’s commitment to framing the state’s Distribution System Planning process in relation to the state’s greenhouse gas reduction and renewable energy development goals. The following comments are intended to bring the Commission’s attention to issues and areas that we – as stakeholders and public participants – find to be critical for the Commission’s consideration as it prepares for the regulation development phase of the state’s Distribution System Planning (DSP).

Comments on the Final Report and the DSP Process

I. To assure the implementation of a DSP process that will achieve the state’s policy goals, DSP regulations will need to provide detailed and specific requirements.

We have appreciated the opportunity to have detailed discussion of the many components of DSP identified in the NARUC/NASEO Jade Process Map with our colleagues from the utility sector, and with them have reached consensus in many areas. However, at the institutional level, there are many forces that will resist the substantial changes in the distribution system required to achieve our policy goals of decarbonization of the electricity sector and transition from the existing radial system to one supporting the extensive development and participation of Distributed Energy Resources (DERs). Among those forces are:

- For “Investor-Owned Utilities” a primary organizational responsibility is to maximize return on investment for their investors. Such maximization of return creates a very strong incentive for capital investment, while many of the changes involved in distribution system modernization may be better achieved by technical improvements and implementation of “Non-Wires Solutions” (NWSs) instead of capital investment.
- Utility management, engineering, and technical staff have extensive experience with the way the existing distribution system is structured and managed. While this is appropriate and appreciated,

important transformations are occurring in the electric industry. Clear and specific regulation requirements will support utility professional staff in adopting and implementing these new developments, rather than defaulting to *status quo* approaches.

We note that the utilities supported the WG's Phase 1 report, which asserted that the existing distribution system was adequate to meet the state's needs, while failing to consider policy goals and the transition to DERs. We, along with Commission Staff and other state agencies and ultimately the Commission itself, found Phase 1 itself and that report to be inadequate.

Again, we appreciate and value the respectful and cordial working relationships that have been established with our utility representative colleagues in the WG, and look forward to continuing those relationships in the regulation development phase. However, we understand that, at the institutional level, those colleagues will not be the ones making utilities' investment decisions. Therefore – without prejudging the Commission's decisions in any area of DSP – we strongly recommend that the Commission require that DSP regulations have clear definitions and specific requirements for all components of the DSP process, while allowing the utilities to meet those specific requirements in their own way.

II. We support the OPC Straw Proposal recommendation to establish a specific docket and review process for DSP.

The fundamental importance of modernization of the distribution system to the achievement of the state's policy goals demands ongoing engagement of the Commission in reviewing plans and progress. The utilities' proposal for DSPs to be filed "for informational purposes" with the Commission is not the level of Commission or stakeholder engagement necessary to ensure that utilities achieve the pace of electric sector transformation which the Climate Solutions Now Act (CSNA) requires. We support a collaborative approach to development of the DSPs, as envisioned in the Utility Straw Proposal. However, such a process must also provide stakeholders and the Utilities opportunity to weigh in on the consensus (or lack thereof) achieved in the utility DSP proposals and provide the Commission the opportunity to consider a decision on areas of non-consensus, as envisioned by the OPC Straw Proposal.

As noted in the Report, we recommend at a minimum that the Commission hold an "EmPOWER-like" hearing for draft DS plan presentation and comment, organized by the Commission and open to stakeholders/public participants. As recommended within the OPC Straw Proposal, stakeholders and members of the public should also be able to submit written comments on the draft DSPs. This process would allow the Commission to have further hearings if there is significant disagreement or concern about a proposed plan. The timing of these hearings will need to be set such that a final DS plan may inform subsequent Multi-Year Rate plans, as the Commission requested.¹

Finally, as described in the OPC Straw Proposal, a critical objective of the DSP docket must be to offer transparency into all distribution system investments planned for the following five years, discuss improvements to DSP processes and capabilities, and highlight progress towards the achievement of CSNA goals.²

III. DSP regulations should specify key capabilities required by utilities, and establish timelines for their development.

¹ Order No. 90777 at 10.

² OPC Straw Proposal at 7.

The Final Report and the Jade Process establish certain capabilities as essential to achieving the required distribution system development and its management. The OPC Straw Proposal also addresses development of a roadmap of “actions to bridge the gap with regard to future forecast processes and future end-state.”³ We support this recommendation. Despite the plans and intentions expressed by the utilities for capacity development in many areas, the present reality is that these capabilities are limited or do not exist. In Phase 1 of the Work Group, all utilities acknowledged that they do not presently have forecasting of growth of Electric Vehicles (EVs), electrification, or Energy Efficiency (EE) and Demand Response; only PHI reported forecasting capability for DERs, but that forecast predicted decreasing rates of solar development through 2033 and capped solar expansion at the level possible under existing capacity (as presently defined by the utility). BGE reported the intention to develop DER forecasting capacity by 2024.

At minimum, we believe that regulations must include requirements for the following capabilities and establishment of timelines for their development (roadmaps, as noted in the Final Report), drawing on the technical points made in the Final Report:

- High-resolution load forecasting including disaggregated forecasts of electrification and EV charging;
- Forecasting for specific categories of DER (rooftop BTM solar; FTM solar like community solar; EV discharge to grid; energy storage; and energy efficiency/demand response);
- Hosting capacity analysis and associated interconnection support information;
- Hosting Capacity Upgrade Plans and criteria for right-sizing hosting capacity upgrades;
- Grid needs assessment, meaning an assessment of future expected system deficiencies, such as those relating to hosting capacity upgrades, resilience and mitigating climate risk, coordinated gas-electric planning for decarbonization;
- Identification of possible solutions to grid needs, including non-wires alternatives, planned capital investments, and/or programmatic solutions; and
- Information on Virtual Power Plant (VPP) deployment and the number of DERs participating in wholesale market DER aggregation, per FERC Order No. 2222.

Again, we understand and accept that each utility will need to meet the capability requirements in their own way; but all utilities having these capabilities will be essential to effective DSP in the state.

IV. DSP regulations should require the establishment and application of consistent DER and NWS value assessment.

The utilities report that presently, their benefit-cost analysis process does not include value considerations for DERs and NWSs. As noted in the Jade process map, locational value is an important attribute of DERs. Beyond locational value, DERs can provide value in increasing reliability, moderating demand, reducing cost, and protecting vulnerable customers, in addition to their intrinsic value in terms of carbon reduction. Many of these attributes also pertain to NWSs in contrast to capital-intensive wired solutions.

The DSP WG received a presentation from the Commission-designated group working to develop a Unified Benefit Cost Analysis methodology, under the Commission’s Case 9674; that presentation indicated that this UBCA methodology will capture many of the value attributes of DERs and NWSs.

We therefore recommend that DSP regulations should require the development by utilities of DER locational value assessments in their service areas. We further recommend that the Commission should require consistent

³ *Id.*, at 15.

application of the UBCA methodology, once developed and approved, in utilities' consideration of potential DER and NWS development.

V. The establishment of key metrics and their consistent reporting is essential to DSP success in meeting state policy goals.

These metrics will provide the tools needed by the Commission itself, other state government agencies and legislators, and stakeholders/public participants to track and evaluate progress in key Distribution System areas essential to achieving those goals.

We support the categories of metrics identified in the Final Report, as well as those specific metrics noted as consensus items. We also accept and appreciate that some metrics that reflect technical areas also being dealt with in other Work Groups – such as EVs and battery storage – should be developed through consultation with those Work Groups. The appropriate outcome will be to have either specific metrics for those areas that are common to both Work Groups, or – for metrics touching on another Work Group's technical area but required specifically for DSP monitoring – developed through consensus with that other Work Group.

In terms of reporting, we agree with other parties that there should be an annual DSP report that includes latest values of the agreed upon metrics for each utility.

We do not agree with the utilities that the metrics reporting should be fragmented by having metrics developed through cooperation with other Work Groups reported only to those Work Groups. This approach would make it very difficult for the Commission, other agencies, legislators, and stakeholders/public participants to get a coherent understanding of Distribution System progress (or lack thereof). Moreover, metrics developed in isolation will likely lead to conflicting metrics and eventual implementation problems.

We do agree with the compromise position that the utilities will need to calculate and report each metric only once per reporting cycle. If a metric is reported to another Work Group or the Commission on a cycle that differs from the DSP reporting cycle, the latest reported value would also be used in the DSP annual report. For each utility this annual report should also include:

- Distribution system investments planned for the following five years, including cost and description (possibly all investments above \$1 million, or an alternative threshold);
- Discussion of actions and progress in developing specified DSP-related processes and capabilities; and
- Narrative evaluation of progress towards the achievement of CSNA goals, including factors promoting progress, obstacles encountered (and responses), and lessons learned.

VI. The regulation development process must define how equity will be addressed in Distribution System planning and implementation.

The Final Report leaves this issue hanging, but there is a clear legislative, executive, and Commission intention to have distribution system evolution address the needs of underserved and overburdened communities. The utilities have correctly noted that the distribution system itself is not organized in a way that corresponds to identifiable areas like census tracts. However, they have helpfully suggested that it will be possible to identify feeder circuits serving parts of such identifiable communities; this may provide a basis for evaluating the equity effect of at least some aspects of Distribution System function and development – like measures of reliability, or development of Virtual Power Plants for resiliency and participation in grid services. Participation in the DSP process of appropriate representatives of underserved and overburdened communities and segments of the population (like the elderly) will be an important way to both identify ways to consider ways to plan the distribution system with the needs of these communities and populations in mind, and to help monitor equity and impact of distribution system development on those communities and populations.

VII. The regulation development process should draw primarily from the OPC Straw Proposal.

The Final Report provides stepwise discussion of every element of the Jade process; but those elements mix high level dimensions (like Goal and Objective setting), technical components (like Forecasting and Hosting Capacity Analysis), and process elements (like stakeholder participation). Overall, while all the Jade elements are worthwhile for DSP, the “map” doesn’t actually offer a coherent operational approach.

The two straw proposals provided to the Commission as Attachments to the Final Report itself each offer useful frameworks or information that will help the Commission, the Work Group, and ultimately all participants in achieving an effective DSP process.

The Joint Utilities’ Strawman was substantially modified and finalized through consultation with WG participants, and ultimately achieved partial consensus. It provides a general framework for the sequential process of DS plan drafting and revision, largely based on the Jade Process Map framework, with multiple specified points for stakeholder/public participant review and input. (Of note, consensus was only reached when the proposed process was specified to be centered on the development of forward-looking plans, not just on reporting of past actions.)

The Utilities’ Straw Proposal contains one significant gap, however: it notes that the feedback from stakeholders will only be considered in preparation for a subsequent DSP cycle -- it doesn't provide a process for incorporating stakeholder feedback into the draft plan for the current cycle. While we support many elements of the Utilities’ Straw Proposal, we do not recommend its adoption due to this key transparency and stakeholder engagement issue. We reiterate that this process of plan development, proposal, stakeholder participation and feedback, and finalization should occur in the context of a formal Commission docket and review.

We also note that, beyond outlining a sequence of steps for the planning and review process, the Utilities’ proposal is framed at a high level of generality: it does not offer any of the technical details and specificity of action requirements that the DSP process will also demand.

On the other hand, the OPC Straw Proposal is valuable in offering an organized approach to those specific technical and action requirements. It does so by organizing the technical content of Jade into a coherent set of action areas and providing recommendations for regulation content in those areas. In doing so, it provides extensive documentation of policy and implementation experience from other states, utilities, and organizations developing progressive approaches to DSP; the Commission will find these documented experiences to be helpful in its own thinking about next steps for Maryland’s own DSP process.

The OPC Straw Proposal also provides much more specific responses than the Final Report itself to the Commission’s request in Order 90777 for evaluation of “*how well current utility practices*” support “*each of the [PUA § 7-802] policy goals.*”

We are not wedded to the OPC/Strategen Strawman’s proposed calendarization of DS plan review, recognizing that the review calendar and cycle will need to be adapted to the different utilities’ own planning cycles and the Commission’s established requirements. However, we note that the OPC/Strategen Strawman, the Joint Utilities’ Strawman, and the DSP WG’s Final report all generally agree on the need for three planning horizons – near-term (1-3 years), medium-term (3-6 years), and longer term (at least 10 years) – as well as for three scenarios based on rates of change in the electricity sector.

VIII. Finally, the DSP regulations should promote prompt action in areas where near-term distribution system change is possible to promote movement toward the state’s policy goals.

The present configuration and management of the distribution system presents some obstacles or shortcomings that impede maximization of current potential expansion of DERs or realization of greater greenhouse gas reduction. Several areas for accelerated progress have been identified and mandated by the 2024 DRIVE Act (SB959, now PUA § 7-1001 through 7-1007). Others – including the implementation of MCAM and the ability of utilities to propose plans to proactively upgrade the distribution system – have been identified by the Interconnection WG and the Commission in RM 81. However, there is still need for further definition, specificity, and timelines for action in these areas, as well as potential for action in additional areas.

Areas for potentially impactful near-term DS-related action by utilities include:

- Increased use of Time-of-Use rates (PUA § 7-1003);
- Increased use of AMI data for planning, particularly in the development of feeder specific load shapes that can guide planning;
- Expanding/Geotargeting of energy efficiency/demand reduction actions;
- Increasing availability and incentives for bidirectional EV interconnection (PUA § 7-1004);
- Increasing support for microgrids and Virtual Power Plants, especially for low- and moderate-income customers and overburdened/underserved communities (PUA § 7-1005/6);
- Near-term implementation of Hosting Capacity “rightsizing” and Upgrade Planning;
- Interconnection process streamlining, and maximizing hosting/interconnection information for developers – queue, estimated interconnection cost information, feeder load and capacity data, etc.;
- Recognition and exploitation of the new distribution system support capabilities (such as Volt-Var and phase balancing) incorporated in the smart inverters that meet the new IEEE 1547-2018 standard; and
- Accelerating utilization of Distribution Management Automation and Advanced Distribution Management/Distributed Energy Resource Management Systems.

We appreciate the opportunity to offer these comments on the results of the DSP Work Group’s Phase 2, hoping that they will support the Commission as it works to derive a framework for the development of regulations. We also look forward to being part of the Working Group’s continued efforts, once the Commission establishes the parameters for that next stage of work.

Respectfully submitted,

_____/s/
Alfred Bartlett, M.D., F.A.A.P.
Board Member and Energy Policy Lead
Chesapeake Physicians for Social Responsibility

_____/s/
David Kathan
Energy Policy Representative
Sierra Club, Maryland Chapter

_____/s/
Samantha Weaver
Sr. Director, Interconnection & Grid Integration
Coalition for Community Solar Access

_____/s/
Paul Verchinski
Transportation Sector Planner
(Retired)