ELCON, on behalf of Large End-Use Consumers (Sector 8 of Member Representatives Committee), submits the following comments on NERC’s draft “2019 ERO Reliability Risk Priorities Report”. Large Consumers place a particularly high value on electric reliability and appreciate NERC’s diligence in evaluating the risks to Bulk Power System (BPS) reliability. Large Consumers also place a high value on procurement flexibility and are very sensitive to cost impacts. As such, Large Consumers seek to ensure that NERC actions have demonstrated reliability benefits that justify any added costs, rely on incentives instead of standards where appropriate, and preserve procurement flexibility throughout the supply chain.

Report Background

The report reflects the advice of the Reliability Issues Steering Committee (RISC) to the NERC Board of Trustees on reliability risk prioritization and recommends approaches for NERC, the ERO, and industry to take to manage those risks. The report simplifies the 10 identified risk profiles into four consolidated profiles: 1) Grid Transformation; 2) Extreme Natural Events; 3) Security Vulnerabilities; and 4) Critical Infrastructure Interdependencies. The scope of extreme natural events is notable, which used to be limited to hurricanes and winter storms, but now includes tornados, hailstorms, flooding, wildfires, and droughts. Without a better decisional risk framework for such low probability, high impact events, Large Consumers are concerned that additional reliability standards will have costs that outweigh benefits and may restrict their procurement flexibility.

Risk Framework

NERC’s pursuit of risk prioritization is well founded, but it lacks the necessary elements to translate into standards development. An effective risk framework requires decision making criteria, and NERC is yet to define an acceptable level of risk. Large Consumers strongly emphasis that this definition incorporate consumer preferences and basic economic principles as part of the future direction of the ERO Enterprise.
Specifically, where standards are appropriate, they should ensure benefits outweigh costs and evaluate whether more cost-effective alternatives exist. In lieu of or as a compliment to mandatory standards, NERC has a vital role to play in promoting risk-informed decision making. This is especially the case where NERC-registered entities already have incentive to behave in a reliable manner but face an information deficit.

**Risk Profiles**

Large Consumers concur with the identified risks in the report but caution that those the report labels to “manage” are predominately outside of NERC’s control to directly manage. In other words, a standards-first approach will only have limited effectiveness and, if done outside an economic framework, may impose costs that outweigh benefits to consumers. Rather, NERC’s role in achieving “influence by information” should be the predominate strategy. This is especially pertinent to a few of the identified risks the report recommends to “manage” including:

- **Changing Resource Mix.** NERC can greatly enhance risk-informed decisions of state and federal regulators, policymakers, industry stakeholders, and reliability entities on the reliability implications of the evolving resource mix under different credible scenarios. Such exercises must accurately reflect how markets behave and be careful to avoid central planning bias, especially the overconfidence of modeling to predict outcomes accurately or have the “optimal” answer in lieu of decentralized decision-making processes. “Managing” the resource mix should not take the form of prescriptive standards that undermine the cost-effectiveness of complying with system-wide reliability standards. For example, wholesale market design is intended to achieve a system reliability level by incenting the most efficient and reliable behavior from market participants, including actions to firm fuel supplies. If NERC pursues prescriptive fuel assurance standards, it will undermine market policies, restrict procurement flexibility, and raise costs to consumers unnecessarily.

- **Resource Adequacy and Performance.** This is primarily a function of state procurement processes and performance-based regulation in regulated states, where NERC analysis could help inform and improve state decision-making. In restructured states, resource adequacy and performance is achieved by market design. This could also benefit from improved NERC analysis like loss-of-load probabilities under different capacity accreditation scenarios. NERC should steer clear of “capacity counting” exercises under scenarios that do not accurately reflect how regulated processes and markets determine resource entry and exit.

- **Cybersecurity Vulnerabilities.** NERC has a very important role in cybersecurity, but it must recognize that rapidly evolving attack forms will outpace standards development processes. A nimbler approach that unleashes permissionless innovation is key, which
requires clear audit expectations in areas where standards are appropriate. It also must recognize that standards are not cost-effective and sometimes counterproductive when applied to entities who fully internalize the risk of their operations. Manufacturers have incentives that align with BPS security and merely need better information to continuously improve their cyber practices, which will achieve superior performance relative to a standards-heavy approach. Overall, NERC’s key role in cybersecurity is to promote voluntary risk-informed decisions.

**Future Directions**

The report misses the opportunity to look at upside risk, in addition to the downside risk of evolving conditions. New technologies hold considerable promise to cost-effectively improve overall reliability and to mitigate wide area events, such as advanced sensors and flow controls that enable the ability to isolate the consequences of resource inadequacy based on consumer preferences rather than implementing indiscriminate rolling blackouts. Large Consumers increasingly look for creative ways to self-supply in part to meet their well-above-average value of reliability, which means their valuation of bulk system reliability and ability to contribute to it will change.

Generally, the report would benefit from adopting an end-user perspective, rather than presuming that a uniform, arbitrary level of reliability for all firm load is desirable. In particular, NERC should examine the implications of homogenous standards that do not reflect heterogeneous consumer preferences and often restrict supplier and consumer procurement flexibility. The imposition of standards treats reliability as exogenous, which restricts the ability of procurement policies to treat reliability as endogenous (e.g., demand response).

Endogenous reliability would enable utilities and wholesale market design to better differentiate services, such that consumers receive a level of service that they are willing to pay for. Enabling differentiated reliability would reduce the probability of load loss to high value end uses, such as mission critical facilities and certain Large Consumer facilities. RISC should acknowledge the value of considering future risk prioritization criteria that reflect the diversity of consumer reliability preferences.

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