Opening Statement of James B. Robb
President and Chief Executive Officer,
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Before the Federal Energy Regulatory Commission
"Impacts of COVID-19 on the Energy Industry"
Docket No. AD20-17-000
July 8, 2020

Thank you for organizing this technical conference to evaluate the energy industry impacts of COVID-19. The pandemic is an acute reminder of our human interconnectedness around the globe. As the world community continues to navigate the ongoing crisis, NERC serves a vital role in addressing pandemic risks to North America's interconnected grid. Working with the Commission, government partners, policymakers, and industry stakeholders, NERC's work has never been more critical.

NERC is employing all appropriate tools and resources toward addressing the reliability and security risks associated with COVID-19. Because a pandemic is a "people" event, mitigation requires keen focus on supporting continuity of the critical workforce and supply chain. Pandemic risks include:

- Fundamentally, a shortage of critical staff needed to operate and maintain the BPS
- Managing abnormal system conditions, delayed preventive and corrective maintenance, prolonged outages, system operations and control room continuity
- Preparing for the summer peak operating season, including preventive maintenance, supply stocking, and training
- Navigating summer load forecasting challenges
- And increased cyberattacks from opportunistic actors

Combined, these pandemic threats have introduced significant uncertainty that is without precedent and highly challenging even for the most prepared of industries. Yet industry is successfully rising to the challenge, coordinating effectively with government partners, and taking aggressive steps to confront significant new risk. Throughout the crisis thus far, NERC has not observed any degradation to reliable operation of the BPS.

NERC is addressing pandemic risk through focused activities in three areas: situational awareness, coordination with government partners and industry, and regulatory discretion. As my full statement is included for the record, I will focus on a few highlights.

When the crisis began to unfold, NERC identified a need to support industry's preparedness for pandemic conditions. In February, the E-ISAC sent an All-Points Bulletin alerting companies of the potential operational and security impacts of pandemic conditions. On March 10, we issued a Level 2 Alert asking a number of questions concerning industry preparedness. Responses found that pandemic planning was pervasive. More than half said they would support mutual aid requests. Responses also identified risk factors, including the potential for summer staffing and materials shortages, and impacts from construction and maintenance delays.

In April, NERC issued a special report reviewing reliability considerations and operational readiness. The report found no specific threat or degradation to the reliable operation of the BPS. However, as pandemic mitigation and containment strategies continue, prolonged periods of operator sequestration and deferred maintenance could increase industry's risk profile and exacerbate impacts during the summer months, and potentially over the longer-term horizon.

Coordination with industry and government is another critical focus area. NERC continues to convene weekly calls with Reliability Coordinators across North America. These meetings provide a forum for RC's to share challenges and solutions, and to coordinate activities. Thus far, RCs report that the sector is effectively navigating challenges with no reliability impacts. Through the ESCC, NERC also participates in ongoing coordination calls with numerous government partners.

Finally, working with the Commission, NERC has exercised targeted regulatory discretion to help industry stay focused on the immediate reliability and security needs. Areas of discretion include:

- Guidance advising Registered Entities that we will consider the impact of the pandemic in evaluating compliance with Reliability Standards,
- Temporary suspension of in-person compliance activities,
- Deferral of certain new standards requirements falling in the second half of 2020.

In conclusion, the ERO Enterprise remains focused on our core mission. Our work on supply chain and other standards is continuing. Through innovation, the Regional Entities have migrated many traditional onsite activities to offsite settings. This includes work with their Registered Entities on their monitoring activities. Working with the Regions, NERC is tracking potential noncompliance related to pandemic impacts and using regulatory discretion when appropriate.

I would like to thank the Commission for our strong working relationship and support. While the pandemic is stressing organizations, NERC remains highly resilient and nimble in our ongoing work with industry, the Commission, policymakers, and government partners.

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Thank you for organizing this technical conference to evaluate the impacts of COVID-19 on the energy industry of the United States. The pandemic is an acute reminder of our human interconnectedness around the globe. As the world community continues to navigate the ongoing crisis, the North American Electric Reliability Corporation (NERC) serves a vital role in addressing pandemic risks to North America's interconnected grid. Working with the Federal Energy Regulatory Commission (FERC), government partners, policymakers, and industry stakeholders, NERC's work has never been more critical.

NERC is employing all appropriate tools and resources toward addressing the reliability and security risks associated with COVID-19. Because a pandemic is a "people" event, mitigation requires keen focus on supporting continuity of the critical workforce and supply chain. Pandemic risks include:

- Fundamentally, a shortage of critical staff needed to operate and maintain the bulk power system (BPS)
- Managing abnormal system conditions, delayed preventive and corrective maintenance, prolonged outages, system operations and control room continuity
- Preparing for the summer peak operating season, including preventive maintenance, stocking of supplies, and training
- Navigating summer load forecasting challenges due to changed work habits and economic factors
- Increased cyberattacks from opportunistic actors

Combined, these pandemic threats have introduced significant uncertainty that is without precedent and highly challenging even for the most prepared of industries. Yet industry is successfully rising to the challenge, coordinating effectively with government partners, and taking aggressive steps to confront significant new risk. Throughout the crisis thus far, NERC has not observed any degradation to reliable operation of the BPS.

I would like to thank the Commission for our strong working relationship and support of measures that help industry stay focused on the immediate reliability and security needs. While

the pandemic is stressing organizations, NERC remains highly resilient and nimble in our ongoing work with industry, the Commission, policymakers, and government partners.

Throughout this ongoing crisis, the ERO Enterprise remains focused on our core mission. Our work on supply chain and other standards is continuing. Through innovation, the Regional Entities have migrated many traditional onsite activities to offsite settings. This includes work with their Registered Entities on their monitoring activities. Working with the Regions, NERC is tracking potential noncompliance related to pandemic impacts and using regulatory discretion when appropriate.

As discussed below, NERC is addressing pandemic risk through focused activities in three areas: situational awareness, coordination with government partners and industry, and regulatory discretion.

Situational Awareness

As the early stage of the crisis began to unfold, NERC identified a need to support industry's preparedness for pandemic conditions. On, February 5, the Electricity Information Sharing and Analysis Center (E-ISAC) distributed an All-Points Bulletin alerting companies of the potential operational and security impacts of pandemic conditions. On March 10, 2020, NERC issued a Level 2 Alert recommendation to industry, "Coronavirus Disease (COVID-19) Pandemic Contingency Planning." The Alert recommended that companies:

- Maintain suitable situational awareness
- Reinforce good personal hygiene practices and employ deep cleaning regimens
- Review and update existing business continuity plans
- Assess the organization's resilience against supply chain disruption
- Assess the need to adjust planned construction and maintenance
- Anticipate and prepare for coronavirus-themed opportunistic social engineering attacks

The Alert also asked companies if they have established pandemic response plans, reviewed staffing and supply chain needs, and of their ability to support mutual aid agreements. Key takeaways from the Alert include the following observations:

- Pandemic planning is pervasive across the industry
- The majority of companies have reviewed pandemic staffing requirements
- A large majority have reviewed supply chain needs
- More than half said they would support mutual aid requests

- Other risks could lead to constraints over the summer, such as staffing shortages, material shortages, and the ability to complete major construction and maintenance projects

Other NERC activities include coordination with Reliability Coordinators (RCs). NERC's Bulk Power System Awareness department convenes weekly calls with RCs across North America. These weekly meetings provide a forum for RC's to share challenges and solutions, and to coordinate activities. Thus far, RCs reported no reliability issues during pandemic conditions. Other findings include:

- Testing kits are available
- COVID-19 cases are starting to rise in several states where RCs are located
- Most RC organizations are extending their return to work as a result of seeing increased cases within their region of the country
- An increase in load in some areas, although it is still lower than pre-COVID-19

To support an immediate need for focused attention on pandemic reliability and security risk, NERC published a special report on April 23, 2020.[1] The special report, *Pandemic Preparedness and Operational Assessment – Spring 2020* — reviews reliability considerations and operational preparedness. The report found no specific threat or degradation to the reliable operation of the BPS. However, as pandemic mitigation and containment strategies continue, prolonged periods of operator sequestration and deferred equipment maintenance could increase industry's risk profile and exacerbate impacts to the BPS during the summer months, and potentially over the longer-term horizon. NERC examined reliability risk across three operating periods:

Spring 2020	Summer 2020	Long-Term
• No specific reliability issue identified • Potential workforce disruptions • Supply chain interruption • Increased cyber security threat and monitoring • Different system conditions including lower	• Continued potential for workforce disruptions; support service disruption • Potential equipment and fuel supply chain disruptions • Deferred generation maintenance and other	• Potential changes to generation and transmission in-service dates • Increased remote operation of non-critical staff • Changes to pandemic preparedness and

[1] NERC Special Report, *Pandemic Preparedness and Operational Assessment – Spring 2020,* April 23, 2020, https://www.nerc.com/pa/RAPA/ra/Reliability%20Assessments%20DL/NERC_Pandemic_Preparedness_and_Op_Assessment_Spring_2020.pdf.

demands and higher voltages • System operators under sequester • Noncritical staff are remote	factors impacting unit availability • Generation in-service dates	operating plans based on lessons learned *Note: a more granular assessment will be Included in NERC's 2020 Long-Term Reliability Assessment*

Following the special report, NERC's *2020 Summer Reliability Assessment* (SRA) provides an additional view of pandemic-related risk during the summer operating season.[2] The SRA emphasizes the need to focus on any deferred maintenance, protect critical electricity workers, and manage demand forecast uncertainty. With regard to summer season maintenance, some owners and operators have deferred or canceled preseason activities in response to pandemic-related issues. Monitoring the progress of ongoing efforts to prepare staff and equipment for summer will be important to ensuring the availability of anticipated resources to meet electricity demand.

System and generation plant operators have implemented operating postures and personnel restrictions prescribed by their pandemic plans in order to protect essential personnel and support reliable operations. Many of these measures will need to be maintained for the foreseeable future. There is a continuing risk that control centers or plants could be temporarily shut down if a significant number of operators or plant employees test positive for COVID-19 despite preparedness efforts. As restrictions are relaxed, operators will likely need to stay postured to return to heightened protections in response to dynamic public health conditions.

The pandemic has also introduced significant new uncertainty for electricity demand forecasting during the summer months. System operators must be prepared to address this uncertainty and potentially challenging operating conditions resulting from low demand on the system.

Coordination with Government Partners and Industry

As a steering committee member of the Electricity Subsector Coordinating Council (ESCC), NERC participates in ongoing coordination calls with government partners, including the Departments of Energy, Homeland Security, Health and Human Services, and FERC, as well as a broad "tiger team" industry effort to spot issues and provide leading practices to help industry operate through the pandemic. These calls also included Canadian entities to ensure a full North American perspective. This North American view was further extended through a webinar with

[2] *2020 Summer Reliability Assessment*, NERC, June 2020, https://www.nerc.com/pa/RAPA/ra/Reliability%20Assessments%20DL/NERC_SRA_2020.pdf

the European Union and the European Network of Transmission System Operators for Electricity (ENTSO-E) in which worldwide responses in the energy sector were discussed. We also participate in regular calls with DOE and other government partners to ensure our operational actions are aligned with the government.

The ESCC executive level calls, held as frequently as twice each week at the height of the COVID-19 crisis, convene senior officials in industry and government to share vital information, prioritize industry needs, and coordinate pandemic response. Mutual assistance and unity of message are distinguishing characteristics of the electricity industry. These calls enable real time discussions about challenges facing the industry and development of timely solutions.

For NERC, and in close working relationship with FERC, the calls give us the opportunity to reassure industry that we are there to assist them and help support the response. These industry calls provide insight and help guide our decision making on regulatory discretion, thereby freeing up resources to keep the system running. We did encourage organizations to keep up voluntary reporting, and highlighted other emerging, but related security issues like the Bulk Power System executive order, and COVID-related cybersecurity trends and threats from our E-ISAC.

NERC staff also supported the ESCC on tiger teams that were stood up to address critical priorities. The primary output of that effort was the ESCC COVID-19 Resource Guide, now in Version 8. Our team served as subject matter experts on topics such as supply chain and technology considerations, as well as helping coordinate the drafting of the report alongside industry trade associations. The guide has been used subsequently to respond to storms in the southeast and northeast, as well as responsibly and safely returning the workforce back to the office and field where appropriate.

Through our E-ISAC, we also promoted and shared the guide with other critical infrastructure sectors given its many transferable lessons, especially the communications and financial service sectors through the Tri-Sector initiative. Other sectors, and one or two federal agencies, have found the ESCC resource guide useful in developing their own documents. So the effort has had an impact broader than electricity, and we were proud to have been a part of it.[3]

Concurrent with NERC's support of the ESCC resource guide, NERC, the North American Transmission Forum, DOE, and FERC jointly developed a resource to help utilities create, update, or formalize their pandemic plans.[4] The *Epidemic/Pandemic Response Plan Resource,*

[3] "Assessing and Mitigating the Novel Coronavirus, a Resource Guide," Electricity Subsector Coordinating Council, May 2020, https://www.electricitysubsector.org/-/media/Files/ESCC/Documents/ESCC_COVID_Resource_Guide_v2-03242020.ashx?la=en&hash=D3732CBFB46827AA0331277E8D5CBE0CC4DFC3BF.

[4] See *Epidemic/Pandemic Response Plan Resource*, https://www.natf.net/docs/natf/documents/resources/resiliency/epidemic-pandemic-response-plan-resource.pdf.

based on a plan from one of the Power Marketing Administrations, focuses on planning/preparedness, response, and recovery activities for a severe epidemic/pandemic. Noting that these types of events are unpredictable, an effective response depends on flexible and scalable management strategies and preventive measures taken in advance of potential events. The document is complementary of other pandemic resources and has a specific and granular focus on operational aspects. Though developed for electric transmission organizations, the information may be adaptable to other critical infrastructure sectors and subsectors.

Finally, NERC has taken steps to share experiences and lessons learned with regulators and industry in Europe. Under an information sharing agreement with the European Union (EU), NERC convened a webinar with representatives from the Directorate-General for Energy (DG-ENER), the European Network of Transmission System Operators for Electricity (ENTSO-E) and the EU Delegation to the United States. FERC staff and the North American Transmission Forum (NATF) also took part in this discussion. This was an engaging conversation where participants exchanged experiences with response during the pandemic. Although Europe is at a different stage compared to the US, they confronted similar challenges and responded in a similar manner to maintain system reliability and security.

Regulatory Discretion

To help entities focus their resources on safe and reliable operations, NERC has been working with the Commission on the use of regulatory discretion. On March 18, FERC and NERC jointly issued guidance advising all Registered Entities that they will consider the impact of the coronavirus outbreak in complying with Reliability Standards. The guidance stated:

- The effects of the coronavirus will be considered an acceptable basis for non-compliance with obtaining and maintaining personnel certification, as required in Reliability Standard PER-003-2, for the period of March 1, 2020 to December 31, 2020. Registered Entities should notify their Regional Entities and Reliability Coordinators when using system operator personnel that are not NERC-certified.
- The effects of the coronavirus will be considered an acceptable reason for case-by-case non-compliance with Reliability Standard requirements involving periodic actions that would have been taken between March 1, 2020 and July 31, 2020. Registered Entities should notify their Regional Entities of any periodic actions that will be missed during this period.
- Regional Entities will postpone on-site audits, certifications and other on-site activities at least until July 31, 2020. Registered Entities should communicate any resource impacts associated with remote activities to their Regional Entities.

NERC and the Regional Entities received numerous questions concerning the FERC/NERC guidance. To help provide clarity to industry, and in consultation with FERC staff, NERC created a frequently asked questions document that is updated regularly as questions arise.

On April 6, NERC filed a motion with the Commission seeking to defer the implementation of several Reliability Standards that have effective dates or phased-in implementation dates that fall in the second half of 2020. NERC requested a three-month deferral of the implementation of Reliability Standards CIP-005-6 (Cyber Security – Electronic Security Perimeter(s)), CIP-010-3 (Cyber Security – Configuration Change Management and Vulnerability Assessments), and CIP-013-1 (Cyber Security – Supply Chain Risk Management). NERC requested a six-month deferral of the implementation of Reliability Standards PRC-002-2 (Disturbance Monitoring and Reporting Requirements), PRC-025-2 (Generator Relay Loadability), PRC-027-1 (Coordination of Protection Systems for Performance During Faults), and PER-006-1 (Specific Training for Personnel). On April 17, shortly after NERC's initial filing, the Commission granted NERC's motion.

With support from the Commission, the ERO Enterprise released new guidance on May 28 providing additional regulatory relief related to Registered Entities' coronavirus response. The relief temporarily expands the Self-Logging Program to allow all Registered Entities to self-log instances of potential noncompliance with minimal or moderate risk related to their coronavirus response. While Registered Entities remain responsible for maintaining compliance with NERC Reliability Standards, this expansion allows them to focus their immediate efforts and resources on maintaining the safety of their workforce and communities to assure the reliability of the bulk power system during this public health emergency. Under this temporary expansion of the Self-Logging Program, potential noncompliance related to coronavirus impacts and logged consistently with this guidance is expected to be resolved without further action.