

# Water Security Metrics

Cade Clark

National Association of Water Companies

NARUC Committee on Critical Infrastructure

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# CIPAC Metrics Workgroup

- Convened by the Water Sector Coordinating Council (SCC) and Government Coordinating Council (GCC)
- Objectives:
  - To develop a national performance measurement system for the water sector and
  - Align the *14 Features of an Active and Effective Security Program* with the Water Sector Specific Plan (SSP) Goals and Objectives.

# Workgroup Objective 1

- Objective 1: Develop a national performance measurement system. Specifically:
  - Measures that align and support the goals and objectives of the Water Sector Specific Plan (SSP);
  - A system for tracking measures;
  - A reporting structure; and
  - Protocols for collection, retention, and protection of information/reports.

# Workgroup Objective 2

- Objective 2: *Align the 14 Features of an Active and Effective Security Program with the Water SSP goals and objectives. Specifically:*
  - Determine how the features support the goals and objectives of the Water SSP;
  - Ensure that the features explicitly and adequately address the concepts of response, recovery, and all hazards; and
  - Streamline and combine features as appropriate

# Workgroup Process

- 18 members
- Representation from utilities, water sector associations, Federal and State government
- Consensus body
- Four in-person meetings and many conference calls over the last ten months

# Final Report

- Utility measures
  - Activities and outputs measures
  - Hazardous chemical security measures
  - Risk reduction outcome measures
- Voluntary utility reporting system approach
- Utility measures implementation approach, including self-assessment
- Utility reporting baseline date and frequency

# Final Report Continued

- “Other Actor” measures for states, water utility associations, and federal agencies
- Reporting approach for other actor measures
- Updated *Features of an Active and Effective Protective Program for Water and Wastewater Utilities*

# Utility Measures Implementation Approach

- Two part approach
  - “Core set” of measures for national reporting
  - Additional measures for optional utility self-assessment

# Core Set of Utility Measures

- Core measures for national reporting
  - Submitted to third party for national aggregation
- Includes:
  - All 16 utility activity/output measures
  - Hazardous chemicals security measures
  - 3 risk reduction outcome measures

# Utility Hazardous Chemicals Security Measures

- **Measure 1:** Number and percent of utilities with physical and/or procedural controls in place to safeguard hazardous chemicals.
- **Measure 2:** Number and percentage of utilities that include gaseous chlorine in their hazardous chemicals use.
- **Measure 3:** Number and percentage of utilities that have evaluated their disinfection methods considering water quality, public health, and security issues.

# Utility Risk Reduction Outcome Measures

- **Measure for Intruder Detection Capability:** Percent of critical assets with enhanced capability to detect intruders
- **Measure for Power Resiliency:** Percent of utilities that have backup power for critical operations
- **Measure for Production Resiliency:** Percent of utilities that can meet minimum daily demand with their primary production/treatment plant non-functional

# Optional Utility Self-Assessment Questions

- 12 additional risk-reduction outcome measures developed by utilities available for optional self assessment
- Will help utilities gauge progress and improvements resulting from implementation of the activities associated with the core measures
- Results of self-assessment not reported nationally

# Utility Reporting Baseline & Frequency

- Baseline for core set of measures
  - First reporting cycle
- Frequency
  - Annual, in the same month each year
  - Reassess if future DHS guidance recommends different reporting frequency

# "Other Actor" Measures

- 18 measures for EPA, DHS, water utility associations and state primacy agencies
- Examples:
  - Number of state drinking water and/or wastewater programs that participated in one or more Federal or state level emergency response exercises in which the water sector was a focus.
  - Number and percentage of Public Utility Commissions that have designated personnel or a method in place to discuss security costs and issues with utilities.

# Reporting for Other Actor Measures

- Multi-path approach to collection and aggregation of other actor measures data
  - EPA collects and aggregates data on federal measures from EPA & DHS programs
  - Water associations continue discussions and develop an approach for collection and aggregation of association data
  - EPA, ASDWA and states continue discussions and develop an approach for collection of state and PUC data

# Implementation Approach and Timing

- Utility data collected by 3<sup>rd</sup> party
- Reporting system construction to begin immediately
- Questions for beta test by end April 2008
- Data available in 2008

# Continued Workgroup Effort

- Co-chairs' review and recommendation provided to workgroup for fatal flaw review:
  - data management/banding rules,
  - data reporting format, and
- Draft product available for workgroup review and input:
  - Definitions of key terms
- Monthly updates available for workgroup members

# Approval of Final Report

- Final Report approved at WSCC and GCC February 12-13, 2008 meeting