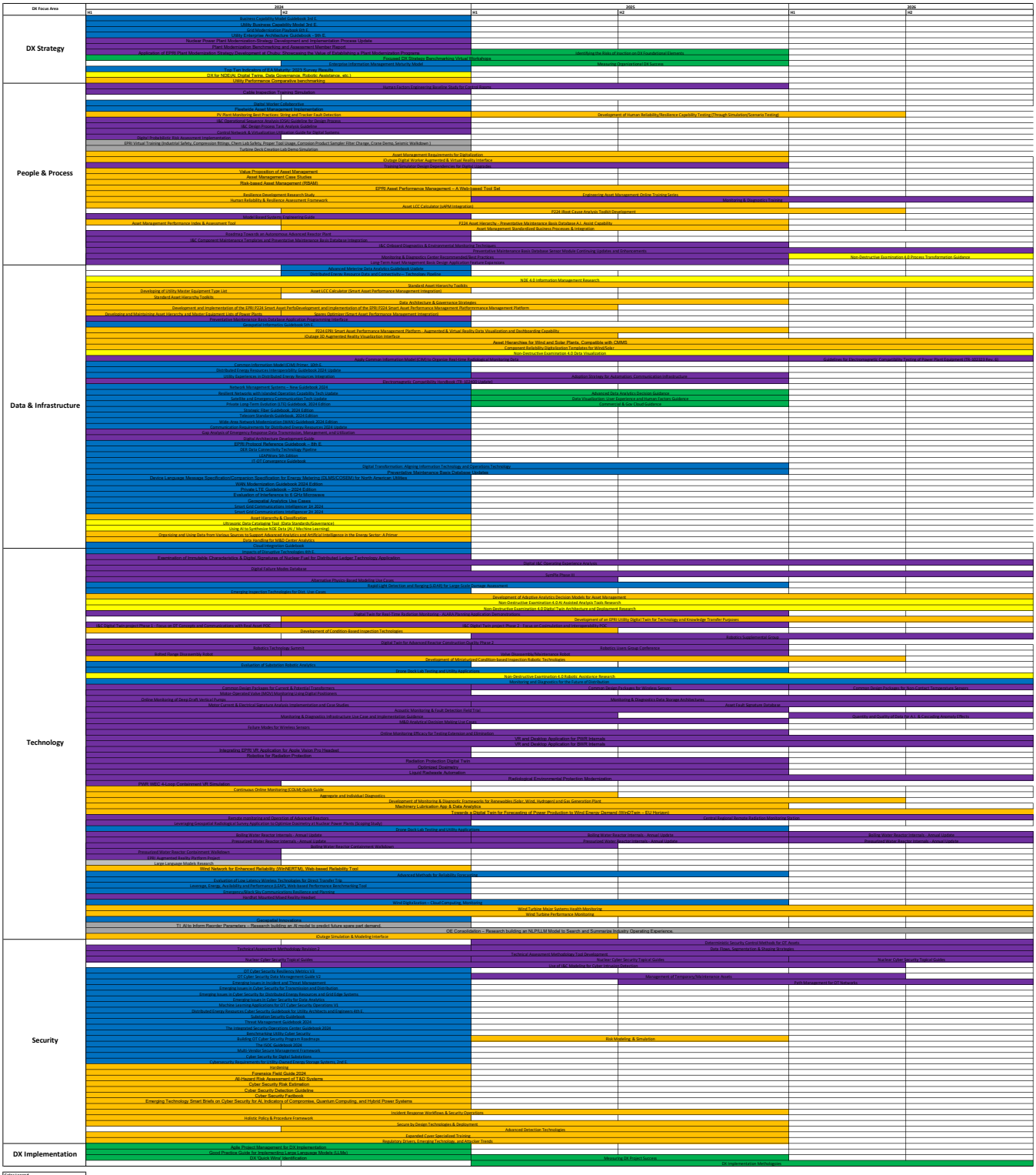
DX Focus Area
2024
2025
2026
H1
H2
H1
H2
H1
H2
DX Strategy
Business Capability Model Guidebook 3rd E
Utility Business Capability Model 3rd E
Grid Modernization Playbook 5th Ed
Utility Enterprise Architecture Guidebook - 5th E
Nuclear Power Plant Modernization Strategy Development and Implementation Process Update
Plant Modernization Benchmarking and Assessment Member Report
Application of EPRI Plant Modernization Strategic Development at Chubu: Showcasing the Value of Establishing a Plant Modernization Programs
Identifying the Risks of Inaction on DX Foundational Elements
Focused DX Strategy Benchmarking Virtual Workshops
Enterprise Information Management Maturity Model
Maturing Management of DX Success
Tool Tech Indicators of EA Maturity: 2025 Survey Results
DX for NDE(AI, Digital Twins, Data Governance, Robotic Assistance, etc.)
Utility Performance Comparative benchmarking
People & Process
Human Factors Engineering Baseline Study for Control Room
Cable Inspection Training Simulation
Digital Worker Collaborative
Human Performance Improvement Implementation
PV Plant Monitoring Best Practices: String and Tracker Fault Detection
Development of Human Reliability/Resilience Capability Testing (Through Simulation/Scenario Testing)
I&C Operational Sequence Analysis (OSA) Guideline for Design Process
I&C Design Process Task Analysis Guideline
Control Network & Virtualization Application Guide for Digital Systems
Digital Probabilistic Risk Assessment Implementation
EPRI Virtual Training (Industrial Safety, Compression fittings, Chem Lab Safety, Proper Tool Usage, Corrosion Product Sampler Filter Change, Crane Demo, Seismic Walkdown)
Turbine Deck Creation Lab Demo Simulation
Asset Management Requirements for Digitalization
Outage Digital Worker Augmented & Virtual Reality Interface
Training Simulator Design Requirements for Digital Upgrades
Value Proposition of Asset Management
Asset Management Case Studies
Risk-based Asset Management (RBAM)
EPRI Asset Performance Management – A Web-based Tool Set
Resilience Development Research Study
Engineering Asset Management Online Training Series
Human Reliability & Resilience Assessment Framework
Monitoring & Diagnostics Training
Asset LCC Calculator (xAPM integration)
P224 Root Cause Analysis Toolkit Development
Model-Based Systems Engineering Guide
Asset Management Performance Index & Assessment Tool
P224 Asset Hierarchy - Preventative Maintenance Basis Database A.I. Assist Capability
Asset Management Standardized Business Processes & Integration
Roadmap Towards an Autonomous Advanced Reactor Plant
I&C Component Maintenance Templates and Preventative Maintenance Basis Database integration
I&C Onboard Diagnostics & Environmental Monitoring Techniques
Preventative Maintenance Basis Database Sensor Module Continuing Updates and Enhancements)
Monitoring & Diagnostics Center Recommended Next Practices
Non-Destructive Examination 4.0 Process Transformation Guidance
Long-Term Asset Management Basis Design Application Software Frameworks
Data & Infrastructure
Advanced Metering Data Analytics Guidebook Update
Distributed Energy Resource Data and Connectivity Key Technology Enabler
NDE 4.0 Information Management Research
Standard Asset Hierarchy Toolkits
Developing a Utility Master Equipment Type List
Asset LCC Calculator (Smart Asset Performance Management Integration)
Standard Asset Hierarchy Toolkits
Data Architecture & Governance Strategies
Development and Implementation of the EPRI P224 Smart Asset PerfoDevelopment and Implementation of the EPRI P224 Smart Asset Performance Management Platform
Developing and Maintaining Asset Hierarchy and Master Equipment Lists of Power Plants
Spares Optimizer (Smart Asset Performance Management Integration)
Operational Efficiency Monitoring via Data Driven Application Programming Interface
Geospatial Informatics Guidebook Ed 1
P224 EPRI Smart Asset Performance Management Platform - Augmented & Virtual Reality Data Visualization and Dashboarding Capability
iOutage 3D Augmented Reality Visualization Interface
Asset Hierarchies for Wind and Solar Plants, Compatible with CMMS
Component Reliability Digitalization Templates for Wind/Solar
Non-Destructive Examination 4.0 Data Visualization
Apply Common Information Model (CIM) to Organize Real-time & Historical Monitoring Data
Guidelines for Electromagnetic Compatibility Testing of Power Plant Equipment (TR-3002013xxx, 4)
Common Information Model (CIM) Primer, 10th E
Distributed Energy Resources Interoperability Guidebook 2024 Update
Utility Experiences in Distributed Energy Resources Integration
Advanced Strategy for Automation Communication Infrastructure
Electromagnetic Compatibility Handbook (TR-3002013xxx)
Network Management Systems – New Guidebook 2024
Resilient Networks with Intended Operation Capability Tech Update
Advanced Data Analytics Decision Guidance
Satellite and Emergency Communication Tech Update
Data Visualization: User Experience and Human Factors Guidance
Private Long Term Evolution (LTE) Guidebook, 2024 Edition
Cybersecurity & Edge/Cloud Guidance
Strategic Fiber Guidebook, 2024 Edition
Telecom Standards Guidebook, 2024 Edition
Wide Area Network Modernization (WAN) Guidebook 2024 Edition
Communication Requirements for Distributed Energy Resources 2024 Update
Gap Analysis of Emergency Response Data Transmission, Management and Utilization
Digital Architecture Development Guide
EPRI Protocol Reference Guidebook – 8th E
OES Data Connectivity Technology Pipeline
LEAPWare 5th Edition
IT-OT Convergence Guidebook
Digital Transformation: Aligning Information Technology and Operations Technology
Preventative Maintenance Basis Database Updates
Device Language Message Specification/Companion Specification for Energy Metering (DLMS/COSEM) for North American Utilities
WAN Modernization Guidebook 2024 Edition
Private LTE Guidebook, 2024 Edition
Evaluation of Interference to IE GHz Microwave
Geospatial Analytics Use Cases
Smart Grid Communications Intelligence 2Q 2024
Smart Grid Communications Intelligence 3Q 2024
Asset Hierarchy & Classification
Ultrasonic Data Catalogue Tool (Data Standards/Governance)
Using AI to Synthesize NDE Data (AI / Machine Learning)
Organizing and Using Data from Various Sources to Support Advanced Analytics and Artificial Intelligence in the Energy Sector: A Primer
Data Handling for M&D Center Analytics
Cloud Integration Guidebook
Technology
Impacts of Disruptive Technologies 4th E
Examination of Immutable Characteristics & Digital Signatures of Nuclear Fuel for Distributed Ledger Technology Application
Digital I&C Operating Experience Analysis
Digital Failure Modes Database
SumPlis Phase III
Alternative Physics-Based Modeling Use Cases
Rapid Light Detection and Ranging (LiDAR) for Large-Scale Damage Assessment
Emerging Inspection Technologies for Gas Line Cracks
Development of Advantage Analytics Decision Models for Asset Management
Non-Destructive Examination 4.0 AI Assisted Analysis Tools Research
Non-Destructive Examination 4.0 Digital Twin Architecture and Deployment Research
Digital Twin for Real-Time Electrical Workforce Tracking Within Substations
Development of an EPRI Utility Digital Twin for Technology and Knowledge Transfer Purposes
EPRI Digital Twin Project Phase 2 Design and Construction and Commissioning POC
Development of Condition Based Inspection Technologies
Robotics Supplemental Group
Digital Twin for Advanced Reactor Construction Online Phase 2
Robotics Technology Summit
Robotics Users Group Conference
Bolted Flange Disassembly Robot
Valve Disassembly/Maintenance Robot
Development of Mitigation and Condition-based Inspection Robotic Technologies
Evaluation of Substation Robotic Analytics
Drone Dock Lab Testing and Utility Applications
Non-Destructive Examination 4.0 Robotic Assistance Research
Monitoring and Diagnostics for the Future of Distribution
Common Design Packages for Current & Potential Transformers
Common Design Packages for Wireless Sensors
Common Design Packages for Non-Contact Temperature Sensors
Motor-Operated Valve (MOV) Monitoring Using Digital Positioners
Online Monitoring of Deep Draft Vertical Pumps
Monitoring & Diagnostics Data Storage Architectures
Motor Current & Electrical Signature Analysis Implementation and Case Studies
Asset Fault Signature Database
Acoustic Monitoring & Fault Detection Field Trial
Monitoring & Diagnostics Infrastructure Use Case and Implementation Guidance
Planning and Execution of Grid Scale A.I. & Computing Assisted Check
MBD Analytical Decision Making Use Cases
Failure Modes for Wireless Sensors
Online Monitoring Efficacy for Testing Extension and Elimination
VR and Desktop Application for PWR Internals
Integrating EPRI VR Application for Apple Vision Pro Headset
VR and Desktop Application for BWR Internals
Robotics for Radiation Protection
Radiation Protection Digital Twin
Optimized Dosimetry
Liquid Radwaste Automation
Radiological Environmental Protection Modernization
PWR WEC 4-Loop Containment VR Simulation
Continuous Online Monitoring (COLM) Quick Guide
Aggregate and Individual Diagnostics
Development of Monitoring & Diagnostic Frameworks for Renewables (Solar, Wind, Hydrogen) and Gas Generation Plant
Machinery Lubrication App & Data Analytics
Towards a Digital Twin for Forecasting of Power Production in Wind Energy Demand (WindTwin – EU Horizon)
Smart Monitoring and Control of Advanced Reactors
Advanced Computer Vision Applications (CV) Development
Leveraging Geospatial Radiological Survey Application to Optimize Dosimetry at Nuclear Power Plants (Scoping Study)
Drone Dock Lab Testing and Utility Applications
Boiling Water Reactor Internals - Annual Update
Boiling Water Reactor Internals - Annual Update
Boiling Water Reactor Internals - Annual Update
Pressurized Water Reactor Internals - Annual Update
Pressurized Water Reactor Internals - Annual Update
Pressurized Water Reactor Internals - Annual Update
Boiling Water Reactor Containment Walkdown
Pressurized Water Reactor Containment Walkdown
EPRI Augmented Reality Platform Project
Large Language Models Research
Wind Network for Enhanced Reliability (WindNERTM), Web-based Reliability Tool
Advanced Methods for Reliability Forecasting
Evaluation of Low Latency Wireless Technologies for Direct Transfer Trip
Leverage, Energy, Availability and Performance (LEAP), Web-based Performance Benchmarking Tool
Emergency Black Sky Communications Resilience and Planning
Hardhat Mounted Mixed Reality Headset
Wind Digitalization – Cloud Computing, Monitoring
Wind Turbine Major Systems Health Monitoring
Wind Turbine Performance Monitoring
Geospatial Innovations
T1: AI to Inform Reorder Parameters – Research building an AI model to predict future spare part demand.
O&E Consolidation – Research building an NLP/LLM Model to Search and Summarize Industry Operating Experiance.
iOutage Simulation & Modeling Interface
Security
Deterministic Security Control Methods for OT Assets
Technical Assessment Methodology Revision 2
Data Flows, Segmentation & Shaping Strategies
Technical Assessment Methodology Tool Development
Nuclear Cyber Security Topical Guides
Nuclear Cyber Security Topical Guides
Nuclear Cyber Security Topical Guides
Use of I&C Modeling for Cyber Intrusion Detection
OT Cyber Security Resilience Metrics V3
OT Cyber Security Data Management Guide V3
Management of Temporary/Maintenance Assets
Emerging Issues in Incident and Threat Management
Patch Management for OT Networks
Emerging Issues in Cyber Security for Transmission and Distribution
Emerging Issues in Cyber Security for Distributed Energy Resources and Grid Edge Systems
Emerging Issues in Cyber Security for Data Analytics
Machine Learning Applications for OT Cyber Security Operations V1
Distributed Energy Resources Cyber Security Guidebook for Utility Architects and Engineers 4th E
Substation Security Guidebook
Threat Management Guidebook 2024
The Integrated Security Operations Center Guidebook 2024
Benchmarking Utility Cyber Security
Risk Modeling & Simulation
Building OT Cyber Security Program Roadmap
The SOC Guidebook 2024
Multi-Vendor Secure Management Framework
Cyber Security for Digital Substations
Cybersecurity Requirements for Utility-Owned Energy Storage Systems, 2nd E
Hardening
Forensics Field Guide 2024
All-Hazard Risk Assessment of T&D Systems
Cyber Security Risk Estimation
Cyber Security Detection Guideline
Cyber Security Factbook
Emerging Technology Smart Briefs on Cyber Security for AI, Indications of Compromise, Quantum Computing, and Hybrid Power Systems
Incident Response Workflows & Security Operations
Holistic Policy & Procedure Framework
Secure by Design Technologies & Deployment
Advanced Detection Technologies
Expanded Cyber Specialized Training
Regulatory Drivers, Emerging Technology, and Attacker Trends
DX Implementation
Agile Project Management for DX Implementation
Good Practice Guide for Implementing Large Language Models (LLMs)
DX "Quick Wins" Identification
Measuring DX Project Success
DX Implementation Methodology
Color Legend
DX Strategy/Roadmap
Business
Generation
Electric Delivery & Customer
DX for Non-Destructive Examination
Technology Innovation