Monthly Board Report – 4/13/23

Agribusiness and Water Council/NWRA

- WOTUS CRA Passed Senate, Biden Vetoed
- Kelly Votes Against CRA to Prevent Unintended
 Consequences of Not Reissuing Similar Rules in the Future
- ND Judge Issued Injunction Blocking WOTUS in 24 More States
- American Farm Bureau Board & State Presidents Tour Yuma
- West Valley Ag Tour Held for State Legislative Interns
- NWRA Supports NPDES Bill & Participates in Farm Bill Briefing
- EPA Announced Proposed National Primary Drinking Water Regulation
- Department of the Interior v. Navajo Nation Lawsuit Underway
- House Push to Revise Endangered Species Act
- Resolution to Overturn Biden ESA Rule Introduced
- OpenET Act Would Create New Program at USGS to Track Water Lost to Evaporation and Transpiration from Soil, Crops & Vegetation in a Basin

American Public Power Association

- APPA Spends an Estimated 5.79% of Dues on Lobbying Activities in 2023
- IRS Released Guidance on Code Section 45J Advanced Nuclear Tax Credit
 - Allows Entities in Partnership to Transfer Pro-Rate Credits w/o Input
 - Guidance Could be Harbinger for Public Power Hoping to Invest in Joint Projects and Claim New Direct Pay Tax Credits
 - May Also Impact JAA via Resale to 3rd Party Through JAA Member
- Comments Submitted for Distribution Transformer Efficiency Standards
 - Proposed Standard Violates Energy Policy & Conservation Act
 - o Didn't Account for Current Customer Pricing in Cost Benefit Analysis
 - o 2023 37.5kVA Transformer Price Expected to be \$2,350 More than
 - Lead Times at 100-140 Weeks for Transformers in 2023
 - o 8-12M Transformers Expected to Be Replaced in Next 10 Years
 - o 1 in 5 Public Power Projects Deferred/Cancelled Due to Transformers



- o Amorphous Steel is Brittle & Doesn't Withstand Stresses Well
- Degradation as High as 20% Over 20 Years
- Performance Likely Worse After 1st Few Years, Negating Benefits
- Due to Limitation, Gas Monitoring May Be Required
- Cost of Adding Gas Monitors Estimated at \$25B Nationwide
- That is \$12B More Than Economic Benefits Estimated w/ AMTs
- AMTs Can't Be Rebuilt Like Current Transformers
- 15% of Current Transformers Rebuilt => Future Worsening of Supply
- 80% of Load Dangerous for AMTs
- o Current Transformers Can Handle Up to 120% Load
- o AMTs Louder Due to Design, Up to 90 dB at 20 Feet
- AMTs Heavier, Possibly Requiring Rerating of Framing Equipment
- More Energy Savings in Building Code Modifications (12%) & Increasing Secondary Conductors (20%) Than AMTs at 0.5%
- Average Water Usage per MWH is 11,857 Gallons
- Electric Sector Used 47.5T Gallons in 2020
- APPA Filed Comments on Interim GHG NEPA Guidance
- Public Power Crews Head to AZ for Light Up Navajo Project

Arizona

- SRP Names Jim Pratt as New CEO, Officially Starting New Role May 5th
- Gila River Signs \$233M Deal for Colorado River Conservation & Pipeline
- Sinema/Kelly Request Utilization of Some of NPS \$1.5B Funds from Annual Budget to Assist Lake Mead National Recreation Area
- Sinema/Kelly Introduce Urban Waters Federal Partnership Act to Support Rio Reimagined Project (Buckeye 18 Mi Salt Cedar Removal May Benefit)
- Grijalva &Sinema Call for National Monument Baaj Nwaavjo I'tah Kukveni
- Park Would be 1,102,501 Acres Next to Grand Canyon National Park
- ADEQ Files NOPR to Increase Fees to Match Inflation
- Sherri Zendri Named Water Master for Gila & LCR Stream Adjudications
- Vetoes Galore as Governor Hobbs has Vetoed More Bills than Signed
- Governor Hobbs Did Sign HB 2496, Aiding Line Siting Backlog
- State Budget Bundle Deadline Being Leveraged w/ AHCCCS Shortfall Threat

Bureau of Reclamation/Dept. of Interior

- DOI Releases SEIS, Alt 1 & 2 Cut 2 MAF from River
- Alt 1 Based on Priorities in Lower Basin, 2 is More Fair Distribution of Cuts
- BOR Could See its Funding Dip by \$444M in fiscal 2024, 12% Dip from 2023
- Interior Requests Input on Lower CO River Basin Efficiency Program
- Despite Wet Winter, Hoover Elevation Projected at 1034.27' Sept 2023
- Releases from Hoover Projected at 8.733 MAF
 - Generation for WY2023 from Hoover at 3,044.4 GWH
 - Generation for WY2023 from Davis at 1,050.6 GWH
 - o Generation for WY2023 from Parker at 439.1 GWH
- San Carlos Apache Tribe Signed \$1.5M Agreement w/ DOI to Study Delivery of CAP Water & Infrastructure (BOR Cost Share Estimated @ \$400M)
- \$2.4M for Western Cloud Seeding, Shown to Increase SWE by 5%-15%
- DOI Announces \$585M for Dozens of Drought Projects Across 11 States

California

- White House Approved Major Disaster Declaration in CA Apr. 3rd
- Report From CAISO Calls For \$9.3B of Spending On Power Lines
 - o This is More than Triple the \$3B Laid Out in 2022 Transmission Plan
 - o 46 New Transmission Lines Needed to Bring Renewables to Load
 - o Only 24 (@ \$1.76B) Needed For Reliability
 - o Projected 40 GW of New Load Over Next 10 Years
- CA Bill That Would Require EVs to be Bidirectional Progressing
- CCAs Seeks Storage, Renewable Energy and Resource Adequacy Bids
- CA Ends Some Water Limits After Storms Ease Drought
- BOR Announces Increase in CVP Deliveries Due to Wet Winter
- North-of-Delta Contractors
 - Irrigation Water Service Increased to 80% from 35%
 - M&I Water Service Increased to 100% From 75% of Historic Use
- South-of-Delta Contractors
 - Irrigation Water Service Increased to 80% from 35%

- M&I Water Service Increased to 100% From 75%
- State Water Project Deliveries Up to 75% from 35% in February
- California to Require Half of All Heavy Trucks Sold by 2035 to Be Electric
- Grid Interconnection Requests Triple, CAISO's Moves to Handle Influx
- CCA Acquire 15-Yr 75 MW Long Duration Storage PPA

Colorado River Energy Distributors Association

- Due to Snowpack, Possibility of 70' Increase in Lake Powell this Year
- Snowpack Peaked, Runoff Ongoing
- Spring HFE Proposed for Late April (72 Hour) \$1.4M Cost Estimated
- UT Seeing Over 200% of Snow Water Equivalent
- Unregulated Inflow at 10.9 MAF (March 2023 24 Month Report)
- Releases from Glen Projected at 9.0 to 9.5 MAF this Water Year
- Concerns Expressed Over System Conservation Pilot Program & \$150/AF
- President Budget Asks for \$23.6M for CR ESA/AMWG Activities
- CREDA Submitted \$255M Ask for CR Hydropower Drought Assistance
- Dr. Andrew Schultz Named GCMRC Chief
- Due to Volume of Contracts on Smallmouth Bass, EIS Likely

Department of Energy

- \$200M Announced for Modernization & Expansion of Hydroelectric Power
 & Advancement of New Marine Energy, Federal Dams Don't Qualify
- President Biden 2024 DOE Budget \$52B, an Increase of \$6B (14%)
 - o \$20B for Non-Defense Energy Programs, a \$4.3B (27%) Increase
 - o \$425M to Weatherize and Retrofit Low-Income Homes
 - \$83M to Electrify Tribal Homes & Transition Tribal Colleges to Renewables
 - \$107M for Grid Deployment Office to Support More Reliable &
 Resilient Grid That Integrates Accelerating Renewable Energy Levels
- Office of State and Community Energy Programs Will Launch a New Energy Burden Reduction Pilot with \$50M to Retrofit Low-Income Homes

- New Office of State and Community Energy Programs Will focus on Offering Technical Assistance to Rural Communities
- Secretary Granholm Stated That DOE Will Ensure US Has a Supply Chain for the Grid Which Includes Transformers
- Plan Includes a Doubling of Transmission, Installation of 60 GWs of Clean Energy Capacity Annually through 2030 & 200 GWs from 2031-2035
- EIA Releases 2023 Annual Energy Outlook
- DOE & TVA Enter MOU on Hydropower Technology Development
- Announces Availability of \$750M for Clean Hydrogen Projects
- Report by Idaho Lab Shows Strong Potential of Charging EV Trucks w/ SMRs
- DOE Extends \$2.3B Grid Resilience State and Tribal Formula Grants Program
 Deadline to May 31, 2023
- DOE Released 3 Roadmaps for Bringing Advanced Nuclear, Clean Hydrogen
 & Long-Duration Storage Into the Energy Mainstream
- DOE Increases Efficiency Standards for Window ACs & Portable Air Cleaners
- DOE \$30M Into Funding Cost-Effective Wind Generation Manufacturing
- DOE Requested 33 Full Applications from 79 Concept Papers
- 6-10 Hydrogen Hubs Look to Be Selected this Year, \$6-\$7B
- DOE Launches 2nd Round of Clean Energy Innovator Fellowship Program
- DOE Issues RFI for Distribution & Large Power Transformers

Environmental Protection Agency

- Judge Stall Implementation of WOTUS on Behalf of 2 States (TX & ID)
- Administrator Regan Outlined President \$12.1 billion FY 2024 Budget
- \$165M for Resources to Implement CCR Compliance Program
- \$367M to Assist in Development of National Ambient Air Quality Standards
- Also Included Money to Upgrade Aging Water Infrastructure
- Reagan Testified that the 111 (GHG) Rules Should be Out by Late April
- Biden-Harris Permitting Action Plan Implementation Guide Released
- More States Sue EPA Over Good Neighbor SIP Denials (UT, OK, AR, KY, MS)
- EPA Issues Final Rule for Cutting NOx Emissions from Plants & Industrial
- EPA Proposed New MATS Rule For Coal Plants

Federal Energy Regulatory Commission

- House E&C Letter to FERC Regarding CEQ NEPA Guidance
- FERC Seeking 2.3% Budget Increase to Hire Dozens of Additional Staffers
- Natural Gas Oversight Would Get 12.5% Boost & 27 Additional Employees
- Judy Chang, Former Undersecretary of Energy (MA) Option for Open Seat
- FERC Works On Transmission Reform w/ Focus On Interconnection Rule
- MISO Request to Cancel NextEra Transmission Project Approved (TX ROFR)

Financial Focus

- Feds Raise Rates by 25 Basis Points, Now 5%
- Possible Rate Hike Also in May
- Treasury Releases NOPR on New EV Tax Credit
- New Federal Grant Program Offers \$2.5B for EV Charging Infrastructure
- First Citizens Acquires Silicon Valley Bank
- Six Central Banks & Fed Reserve Will Boost the Flow of U.S. Dollars
- Recent Bank Failures Raise Odds of Recession
- Commercial Bank Lending Dropped \$105B in Last 2 Weeks of March
- West Coast Dockworkers Still w/o Contract, Strike Could Cost \$500M/Day

Industry Update

- 2,000 GW of Generation & Storage Projects Awaiting Interconnection
 - o Increase of 40% Backlog
 - o 95% Of Projects are Renewable & Storage
 - o 21% of Projects in Que Went into Operation from 2000-2017
 - o Average Time from Request to Interconnection is 5 Years
- U.S. Is on Track to Close Half of Coal-Fired Capacity by 2026
 Constellation Energy Begins Producing Clean Hydrogen at NY Nuclear Plant
- Lower Colorado River Authority Picks Location in TX for New Peaker Plant
- U.S. Energy Storage Market Installed a Record 4.8 GW in 2022
- TVA, Ontario Power, Synthos & GE Hitachi Teaming Up to Advance SMRs
- EU Released Proposals to Inject Life into Clean Energy Industry Domestically

- Manchin Considering Nation Wide Fee to Support Struggling Nuke Plants
- 93 Nuke Plants Currently Online, Down from 102 in 2012
- Reuse Of Coal Plants Can Cut SMR Development Costs By 35%
- 6.7 GWs of Wind Power Capacity Installed 2022, 56% drop from 2021
- Mexico is Moving to Power AZ and CA w/ Solar Power in Sonora
- Wärtsilä Completes 200 MW Energy Storage System in South Texas
- Dept of Treasury Encouraged to Revise "Green Hydrogen" Definition

Markets

- PJM Offers Details on Initial Capacity Market Reform Proposal
- States Dealing w/ Right of First Refusal on Transmission Projects
- Since Mid-1990s, Annual HVTL Investments have Increased by 500%
- Snohomish & Tacoma (WA) Help Fund SPP Markets+ Initiative
- WAPA-DSW Joins EIM Market
- States Push Back on Power Grid's 'Shadow Government' RTO's

Meetings

- Arizona Public Power Lunch March 22nd
- RWCD Meeting w/ Irrigation Districts for IRA Discussion March 23rd
- Call w/ Emergy March 24th
- International State of the State- SRP Sponsored March 24th
- IEDA Leadership Program Class 3 March 27th
- Central Arizona College Drought Impacts to Power March 28th
- WAPA-DSW P-DP Meeting March 29th
- Westside Managers' Meeting March 30th
- SRP Technical Conference March 31st
- RWCD Board Meeting April 4th
- Replacement/Firming Power Discussion (APA) April 6th
- Senator Sinema's Water Advisory Committee April 6th
- AMPUA Meeting w/ Rep. Lesko April 7th
- Meeting w/ State Senator Sundareshan April 10th

- Meetings w/ State Senator Fernandez & Rep. De Los Santos April 11th
- Meeting w/ Rep. Stanton April 12th
- CREDA (SLC) April 13-14 (Virtual)
- NWRA Leg & NRECA Conferences April 15-20th
- AEPCO Annual Meeting (Tucson) May 9-10th

Offshore Wind Energy Report

- DOE is Targeting 30 GW of Offshore Wind by 2030 & 110 GW by 2050
- This Includes 15 GW of Floating Offshore Wind
- There is Currently 50 GW of Offshore Wind in the World
- The US Has 4w MW of Offshore Wind in RI & VA
- The US Has 4,200 GW of Offshore Wind Potential (65% in Deep Waters)
- Fixed Offshore Wind is in 60M of Water Depth or Less
- At Capacity, Offshore Wind Industry Would Employ 77K Workers
- This Would Include \$12B/Yr in Investment, 5-10 Manufacturing Plants
- Currently There is a Lack of Domestic Supply Chain
- Targeting \$45/MWH for Floating Wind by 2035, Currently \$150/MWH
- Coastal Areas Have Limited Siting Options and Transmission Capacity
- Report Highlighted Wind to X-Technologies.

Oil & Natural Gas

- Saudi Arabia to Scale Back Crude Production 500K B/D May to December
- NERC Calls for Coordinated Oversight for Nat. Gas Generation & Supplies
- In 2022, Natural Gas Consumption Averaged a Record 88.5 BCF/d
- BLM Approved an Average of 233 Drilling Permits/Month in FY 2022
- DOI was Approving Nearly 400 Drilling Permits Monthly in FY 2020
- As of January 31, 2023, a total of 5,075 APDs were still Pending
- Administration Rolls Out Drilling Ban in the Arctic Ocean
- Next Day, Biden Team Announced a Major Alaska Oil Project
- Natural Gas Storage Capacity has Remained Constant Over the Last Decade
- Natural Gas Demand has Grown Nearly 20% from 2017 to 2022

- Exports Have Grown More than 440% Over that Time (EIA)
- In 2022, Electric Power Sector Consumption Grew 7.5%
- LNG Exports Grew 8.5% in 2022
- U.S. Nat. Gas Production Grew by 4%, or 4.9 Bcf/d, in 2022
- Warm Winter and Overproduction Lowers Nat. Gas Futures
- SoCalGas Planning to Take 630 MMcf/d offline from April 17-28
- First Natural Gas, Oil Auction Since 2021 Draws Bids in GOM's Waters
- Mexico Pacific Limited LLC Saguaro Energía LNG Export Terminal Proposed for Puerto Libertad in Mexico's Sonora State
- Eastern Mediterranean Natural Gas Seen Boosting LNG Supplies for Europe
- EU Energy Ministers Advance Proposal to Limit Russian LNG Imports
- Bear Head's Canadian East Coast LNG Now Looks to Export Hydrogen
- Nevada Adding First Natural Gas-Fired Peaking Capacity in 15 Years
- U.S. Rig Count Rose Four Units to Finish at 758
- Deepwater N.G. Production Forecasted to be 25%+ of Total Output by 2040
- Spending on New Offshore Projects to Soar Over the Next Two Years
- Russia Wants 3X LNG Exports by Opening More of Its Natural Gas Fields
- EIA Sees LNG Exports At Least Doubling by 2050
- CA Regulator Investigating 'Extraordinarily High' Winter N.G. Price Spikes
- Oilfield Jobs Up 2,907, Highest Employment in 3 Years

Transmission/WAPA

- WAPA-WALC Joined EIM April 5th
- WAPA-DSW Agrees to Participate in Phase 1 of SPP Markets+ Initiative
- Western Electricity Coordinating Council is seeking comments on a draft report on long-term transmission planning.
- WAPA-206 FRN Expected to Be Signed by Administrator on May 23
- WAPA-208 FRN Issued for WALC (Necessary for CAISO EIM Participation)
- WAPA Administrator Proceeding w/ FRN for SPP RTO
- WMEG Report Due Out by May 2023
- 3 GW/\$3B TransWest Express Line Approved After 15 Yr Regulatory Process

Washington DC

- House Republicans Introduce H.R. 1, the Lower Energy Costs Act
- Juan Ciscomani Co-Chairs House Colorado River Caucus
- Biggs, Lesko & 63 Others Ask DOE to Withdraw New Transformer Standards
- Senators (Including Kelly) Introduce Bipartisan Nuclear Energy Bill
- Sen. Manchin Introduced Draft Cybersecurity Bill, Public Power Is Included (PURPA 111(d)) Requiring Standards for Retail Sales In Excess of 500 GWH
- Reps. Kustoff and Ruppersberger Introduce Advance Refunding Bonds Bill
- Senate Absences Affecting Business, Last Full Member Vote Occurred Aug 7
- Possible Horse Trading, H.R.1/Permitting Reform for Debt Ceiling Increase
- Biden Threatening to Veto H.R. 1 in its Current Form
- Congress Falls Short in Bid to Override Biden's ESG veto
- Manchin/Risch Introduce Energy Threat Analysis Center Establishment Act
- Manchin/Risch reintroduced the International Nuclear Energy Act

Wildfires

- Forest Protection and Wildland Firefighter Safety Act of 2023 (H.R.1586/ S.796) Introduced by Rep. LaMalfa (R-CA) and Senator Lummis (R-WY)
- Bennet & Hickenlooper Introduce Protect the West Act
- It Would Create a \$60B USDA-Managed Outdoor and Watershed Restoration Fund for Investments in Western Forest
- Would Create a Clean Water Act Exemption for Federal, State, Local, and Tribal Firefighting Agencies to Use Fire Retardant to Fight Wildfires
- FS Plan to Harvest 3.4 Billion Board-Feet of Timber this Fiscal Year
- Goal of Increasing to 4 Billion Board-Feet Within the Next 5 Years
- NOAA Estimates Wildfires Cost \$16.5B in 2020 and \$67.3B from 2016-2020
- In West, Federally Owned Forests Provide @ 52% of Total Water Supply
- House Wildfire Caucus Relaunched
- Federal District Court of Montana Case Could Result in the Banning the Use of Aerial Fire Retardants Nationwide During 2023 Fire Season
- Case Requesting NPDES & 47 State Permits, Could Take 2.5 Years to Get