Monthly Board Report – 2/16/23

Agribusiness and Water Council/NWRA

- Mark Killian Resigns as AZ Dept. of Ag Director
- Jeff Grant Named Interim AZ Dept. Ag Director
- Blue & Gold Gala Raises \$529K for FFA
- AZ Harvested 61,400 Acres of Lettuce in 2022, Broccoli 11,200 AC, Cantaloupes 11,200 AC, Cauliflower 5,500 AC, Spinach 11,500 AC
- 76% of Coloradans Believe Protecting Ag Lands a Must
- Yuma County Agriculture Water Coalition Offer to Conserve Up to 10%
- AG Fest Hosts 60 Legislators & 200 People
- TX & Industry Group Sues Over New WOTUS Rule
- 25 Governors Ask Biden to Delay WOTUS Until After Sackett Case Issued
- <u>Legislation Introduced to Reverse Biden WOTUS Rule via Congressional</u>
 <u>Review Act, Gosar & Ciscomani Co-Sponsor w/ 150 Others</u>
- USDA Issues \$36.5M to 4 Co-Ops in IA for Grid Improvements
- Feds Urge Judge to Reject State Authored Settlement in Rio Grande Case
- McMorris-Rodgers & Bentz Send Letter to DOE @ BPA Fish Recovery Costs

American Public Power Association

- Joy Ditto Resigns as APPA CEO
- APPA & Others Pushback on New Transformer Efficiency Standards
- Michael Coe Joins APPA as VP of Security, Resilience and Energy Solutions
- Expect Hydro Reform Legislation w/ McMorris Rodgers as House E&C Chair
- APPA Received a Letter From Energy & Commerce on LIHEAP Practices
- Omaha PPD to Build Solar Project on Landfill Site
- Springfield, IL Groundbreaking on 10 MW Carbon Capture Project
- Nebraska PPD Launches Siting Study for SMR's
- Decorah, IA Looking at Municipalization
- APPA Submitted Comments to FERC Technical Conference
- APPA Leg Rally Issue Briefs:



- Sequestration of Bond and Tax Credit Payments
- Direct Pay Tax Credits
- Critical Infrastructure and Supply Chain Constraints
- Distributed Energy Resources
- Electric Vehicles
- Energy Efficiency
- Federal Efforts to Address Climate Change
- U.S. Federal Power Program
- Grid Security
- Hydropower
- o Municipal Bonds and Public Power
- Streamlining Energy Infrastructure Permitting
- Nuclear Power
- Preserving the Municipal Exemptions from Federal Pole Attachment Regulations
- Disaster Recovery, Hazard Mitigation, and the Stafford Act
- Electric Transmission Policies
- Electric Reliability & Affordability and the Importance of Natural Gas

Arizona

- Senator Sinema Leaned on CA to Sign on 6-State Letter
- Governor of Sonora Opposes IDE Desalinization Plant in Mexico
- This is a Drop of 300 Bills Compared to the Last Few Years
- Senate Announces A Committee on Director Nominations
- Yolanda Bejarano Elected State Democratic Party Chair
- Jeff Dewitt Elected State Republican Party Chair
- Of the 25 Nominations to Date, Only 2 Have Been Sent to the Senate
- Hobbs State of the State Focused on Education, Water & Affordability
- Governor Plans to Open Office of Resiliency & Gov. Water Policy Council
- Governor Discussed the Creation of Additional Active Management Areas
- Gov. Seems Focused on Groundwater Loopholes (Saudis on State Land)
- Lifting Cap on School Spending, Educator Retention Task Force (\$200M)

- Affordability Translates to \$150M in Housing Trust Fund & \$50M in Child Tax Credit for Families Who Earn Under \$40K
- Governor Introduces Budget Proposal (Add \$250M Rainy Day Fund & \$200M for State Employee Retention & \$5M for ADWR for AMAs)
- Biasiucci Introduces Legislation to Prevent Colorado River Water Transfers from Mojave County (Won't Affect Transfers Already Approved)
- Hassayampa Basin Study Show 4.4 MAF Shortfall Over 100-YR Period
- Pinal County AMA Shows 8+MAF Shortfall Over 100-YR Period
- New Intake Tubes Installed at Lake Powell for Page, AZ
- Stanton Decides Not to Run for Senator, Clearing Way for Gallego
- Grijalva Secures \$14.4M in Community Project Funding for District 3

Bureau of Reclamation/Dept. of Interior

- Powell Elevation 3521.14' & Mead 1048.07' End of Feb (24 Month Study)
- \$728M Rural Water Projects & Tribal Projects & \$125M UCR Conservation
- Navajo Nation Case Argument Set for March 20
- Hoover Capacity at 1,310 MW at 1,046.8'
- Minimum Power Pool of 950' has Capacity of 664 MW
- Worst Case Scenarios Show Powell Below 3490' in Jan 2024
- Hoover Could Follow by Summer of 2025
- \$80M in WaterSmart Grants Now Available
- Current Hoover Wide-Head Turbines N8, A8, A1, N6, N5 Reclaiming 100
 MW of Capacity & Efficiency Improved from 83% to 87%
- \$580M Announced for Indian Water Rights Settlement

California

- CAISO & WEIM Approve Extended Day Ahead Market (EDAM)
- CA Releases Own Letter SEIS Process
- CCA Signs PPA Tied to Compressed Air Storage w/ Hydrostor
- 9 Atmospheric Rivers Hit CA in 3 Weeks, Snowpack at 215% CA Region
- H.R. 215 (R-Valadao) Reintroduced to Expand Water Storage in CA
- H.R. 186 (R-McClintock) Looks to Streamline Water Storage Permits

Colorado River Energy Distributors Association

- Additional Snowpack Means Increased Releases to Balance Mead & Powell
- Multiple Alternatives Presented to Preserve Power at GCD
- Snowpack Currently 143% of Median
- Power Production Down 19% at GCD in 2022 vs, 2021
- Summer Bug Flow Costs Estimated at \$729K in 2022
- Small Mouth Bass Flows Could Result in 322-600 GWH Lost Generation
- Razorback Suckers See Rapid Growth in 2022, Potential Downlisting
- Lake Powell Releases Increased to 7.4 MAF
- Current Forecast Predicts Increase of Powell by 40'
- Jan 2023 Most Probable Inflow to Powell 9.5 MAF

Department of Energy

- DOE Deputy Secretary Turk Estimated S 4232 Would Cost \$125M to Offset
- DOE Announces \$74M for Enhanced Geothermal System Pilot Projects
- DOE Proposes Increasing Transformer Efficiency Levels
- Grid Deployment Office Launches \$760M Transmission and Sitting Economic Development Grants from IRA
- DOE Releases \$9B ROI for Home Energy Rebate Program
- DOE Announces \$47M in Clean Hydrogen Technology Opportunities
- NREL Updates Report on Geothermal Potential in US
- National Community Solar Partnership Launched Slate of Initiatives to Support Deployment of Community Solar Projects
- DOE Awards \$131M in Carbon Capture Projects
- SE Hydrogen Hub Get Approval to Seek DOE Funding
- DOE to Allocate \$118M to Biofuels Projects
- DOE Advisory Board Recommends Strengthening East-West Grids
- DOE Release Draft Application Guidance for \$553.6M in Funding for Hydro

Environmental Protection Agency

EPA Opened Competitive Green Spending Bank - \$27B

- Michael Regan Considering Stepping Down
- Plans to Reject Request to Continue Dumping Coal Ash in Unlined Ponds
- Administration Continues to Try to Undo Trump-Era ESA Reforms
- Region 4 Gave PCB Waste Clean-Up Guidance After Tornados
- New WOTUS Definitions Already Challenged by Texas
- Kristen Averyt is CEQ's New Director of Drought & Western Resiliency
- Region 9 Issued EPA Cleanup Guidance Following Winter Storms & Flooding
- White House Advances NEPA Rule Changes
- EPA's \$100B Climate-Aid Windfall Spurs Turmoil
- 8th Circuit Denies States' Appeal for Social Cost of Carbon (GHG) Case
- Startup Shutdown& Malfunction Policy Requires Removal in SIP Plans
- CEQ Sent OMB NEPA Phase II Rules to Revise Trump Rules
- EPA Seeks to Strengthen National Ambient Air Quality Standard

Federal Energy Regulatory Commission

- FERC Approves WRAP Tariff for First West Wide Reliability Program
- Chairman Phillips Committed to Strengthening Transmission Infrastructure
- That Includes Preparing the Grid for Influx of Clean Energy Investments
- Other Focuses Include FERC Backstop Siting Authority & Extreme Weather
- Environmental Groups Push for Nomination of 5th FERC Commissioner

Financial Focus

- Feds Raise Rates Again, but this Time only be 25 Basis Points
- Future Fed Rate Increases Expected to be 25 Basis Points
- Long Term Expectations is Fed Rate to Peak 5%-5.5%
- March 22 8.5% Inflation (Core Goods 28%, Energy 26%, Shelter 19%)
- Dec 22 6.5% Inflation (Shelter 38%, Food 22%, Energy 8%, Core Goods 7%)
- DOL Q4 Estimate of 2.9% Growth of GDP
- Fed Reserve Announced Climate-Related Scenarios Pilot Program that Big Banks Must Consider
- Current Fed Forecast to Peak in May 2023 at 5.5%

- Historically, 11 Months Between Peak and First Cut
- Possibly Falling to 3% in 2025
- Feds Have Only Achieved a Soft Landing Three Times in History
- Liquidity Tightening Will Lead to Lowed Access & Higher Cost of Capital
- Chairman Powell Says 5M Worker Shortage
- Labor Force Participation Rate Down 1% to 62.3%
- 2023 Expected GDP is 0.5% Growth Rate

Industry Update

- 2023 Generation Mix in US 36% Natural Gas, 19% Coal (Decreasing), 20%
 Nuclear, 24% Renewables (Increasing)
- NuScale Receives Final Rule Certification from NRC for SMR
- IRA Predicted to Bring Annual Renewables Investment to \$114B by 2031
- Car Focused Decarbonization Could Require 3X Current Lithium Production
- WGA Initiative on Producing Hydrogen Using Geothermal Continues
- Andy Berke is the New Rural Utilities Services Administrator
- \$210B of the \$860B Planned for EVs & Batteries Going to US
- Battery Production Projected to by 1,000 GWh/Yr by 2030 in US
- TX Incentivizing More Natural Gas Plants
- PG&E Can't GO Back in Time to Restart Diablo Canyon Relicensing
- Solar Panel Tariff Rollback in Jeopardy with Resolution
- Utility Supply-Chain Constraints Expected Into 2024
- Large Power Transformers Price and Availability to Remain Volatile
- Utility Scale Solar Development Costs Expected to Decrease
- Supply Chain To Support Biden's Offshore Wind Goals Will Cost \$22.4B
- Attacks on US Power Grid Rose to All-Time High in 2022
- First Solar to Invest \$1.3B in OH Plant Since Selling Out Panels to 2026
- US Microgrid Market Reaches 10 GW in Q3 2022

Markets

• ISO NE Files to Use Storage as Transmission Resource

- TVA to Retire Coal Plant, Replace with Combined Cycle Nat. Gas Plant
- Bonneville Power Authority to Use \$350M for Power Rate Reductions
- Interconnection Cost Have Doubled Over Last 3 Years in NE
- Costs to Interconnect in PJM has Risen Sharply
- 3,000 MW (\$2.5B) North Plains 385 Mile HVDC Connects SPP, West & MISO

Meetings

- IEDA Leadership Program Class 1 January 20th
- DC Trip January 23rd to 26th
- Met with Entire Delegation Except Grijalva
- State Society of Arizona -January 25th
- Western Caucus Meeting January 25th
- Annual Reporting Meeting & TWG January 24th to 26th
- APPA Board of Directors Meeting January 30th
- House Natural Resources, Energy & Water Committee January 31st
- Meeting w/ Senator Gowan January 31st
- AZ Farm Bureau Legislative Ag Fest January 31st
- Meeting w/ Senator Carroll February 1st
- Meeting w/ Leslie Myers (SRP) February 1st
- APA/AMPUA Unification Meeting February 1st
- CRSP RTO Meeting February 1st
- CREDA Meeting February 2nd to 3rd (Las Vegas)
- APA REC Meeting February 6th
- WAPA Customer Meeting February 7th to 8th (Denver)
- AMPUA February 10th
- Special E&OC Meeting for Ten Year Operating Plan/ Budget February 15th
- AMWG February 15th

Oil & Natural Gas

<u>California Governor Newsom Asks FERC to Investigate Increase in Costs for</u>
 Western Gas Markets, Citing Possible Market Manipulation

- Gas Powered Cars (ICE) Cheaper to Fuel than EVs in Q1 2022
- UT Austin Explores Repurposing Oil & Gas Well for Geothermal Energy
- Barrasso & Collins Introduce Bill to Prevent SPR Sales to China
- LNG Production Expected to Grow to 22 BCF/Day by 2027 from Current 13
- Equinor Discovers Deepwater Nat. Gas Reserve Off Norway (2-11 BCM)
- EIA Anticipates Cost for Natural Gas in the Electric Power Sector Dropping to \$5.212 in 2023 from \$6.998/MMBtu in 2022
- Latin America Oil & Gas Activities Set to Increase
- Port Arthur LNG (Houston) Receives Final Subscription to Advance Project
- No Global LNG Price Benchmark Currently
- AK Governor Ready to Unlock North Slope for LNG Development
- OH Law Labels Natural Gas "Green"
- Los Angeles County Banning New Oil & Gas Wells

Western Area Power Administration – Including Annual Customer Meeting

- WAPA Releases Power Forward 2030 Strategic Plan
- Increase in Cyber & Physical Attacks
- WAPA/DOE Issues RFI Resulting from CREDA Resource Investigation
- Currently 30% of WAPA Workforce Back in the Office
- EIM Membership has Reduced Pressure on Sierra Nevada Region and BA
- Lead Time for Critical Infrastructure 3X Longer than Before
- DSW Starting to Work on Parker-Davis Contracts that Expire in 2028
- Continuing to Work on One Transmission Rate (OTR)
- TIP Slide Showed 50% for Interstate Transmission, 30%
 Transmission/Interconnection & 20% Other (Including Energy Storage)

Washington DC

- Possible Bipartisan Interest in Permitting Reform
- Stanton Tapped Vice Ranking Member of Transportation & Infrastructure
- Biden to Release Budget on March 9th
- Statutory Debt Limit of \$31.4T Hit in January, Default by June 5th Possible
- Substantive Cuts Proposed for Energy-Water Approps Budget this Year

- Manchin, Barrasso Float Bill to Jump-Start Domestic Uranium
- Robert Hurr Appointed as Special Counsel for Biden Documents
- Gosar Back on Natural Resources
- Ciscomani Gets Approps as Freshman
- Kelly to Chair EPW for Transportation & Infrastructure (WRDA)
- McMorris Rogers Will Focus on Grid Reliability, Permitting Reform & Strengthening Energy Supply Chains
- House Energy & Commerce Holds "Unleashing American Energy" Hearing
- Senate Seats for 2024 23 D's & 11 R's Defending Seats
- Possible 3 Way Race in AZ Makes Prediction Uncertain
- House Science Committee Looks to Make NOAA Independent Agency
- HR 300 Approved 425-0 in the House for Settlement Disclosures (ESA?)
- With Democratic Senate Majority, Biden Nominee's Reappearing this Year
- Top House Appropriator Simpson Says Cuts Coming to DOI & EPA
- Manchin Joins Republicans in Bid to Undo Biden ESG Rule
- Manchin & Westerman Meet to Discuss Moving Permitting Reform
- Bill Introduced to Allow Drones to Go Beyond the Visual Line of Site

Wildfires

- Prescribed Burns Lag on Federal Lands, 84% Occur on State & Private Land
- USDA Outlines \$490M to Address Wildfire Risks
- Money to Supply 200 Shovel Ready Projects
- Feinstein Advocates for Updated Biomass Maps to Show Viability of Forest Thinning/Biomass Plants in the West
- Senator Feinstein (D-CA) introduced the Wildfire Emergency Act (S.188)
- Rep. Rosendale (R-MT) Introduced Legislation to Overturn 9th Circuit
 Decision to Overturn Cottonwood Case Decision (FS Consultation w/ FWS)