

## Monthly Board Report – 8/12/22



### **Agribusiness and Water Council/NWRA**

- UT lawmakers float bill to rescue Great Salt Lake
- S. 192, sponsored by Wyden (D-Ore.) Would Add 4,700 mi of rivers/streams in OR to National Wild and Scenic Rivers System
- Grand Canyon Trust at it Again, Suing Desert Power Over Oil Shale Plant
- Drought Drives Las Vegas to Cap Size of New Home Swimming Pools
- House Approves Bipartisan PFAS Research Bill
- Hickenlooper Bill Supports Paying Farmers to Use Less Water

### **American Public Power Association**

- APPA Sent Letter to Inslee & Murray on Lower Snake River Dams
- Comments Sent to EPA Region 10 on Applying NPDES to Hydro Cooling H2O
- Advisory Committee Held in UT, Heard Presentation by UAMPS @ NuScale
- Received Public Power Update in UT by Heber Power
- Discussed Shrinking Salt Lake & Environmental Impacts (Like Salton Sea)
- Julian Hong Joins APPA as Manager of Environmental Policy

### **Arizona**

- Kari Lake Secures AZ Governor Republican Primary Race
- Yuma's Save the River Plan Looks to Conserve 1 MAF @ \$1,500/AF
- Southwest Public Power Agency Signs 300 MW Solar + Battery PPA
- Wildfire Reponse & Drought Resiliency Act (H.R. 5118) has AZ Provisions
  - \$500M for Reclamation for Drought
  - WMAT Extended to 2025
  - Hualapai Water Rights Settlement (4K AC-FT & \$180M)
  - CRITS Granted Ability to Lease Water
  - Tribal Waiver for Non-Federal Share of WaterSmart Grants
- S. 387, the "Grand Canyon Protection Act," Mining Ban Deadlocked in ENR
- Navajos Approve \$1B in Funding for Water, Electric, Sanitation & Housing

## **Bureau of Reclamation / DOI**

- AOP – 2023 Water Year Releases of 7 MAF
- Jan 2023 Elevation Forecast of 3,503.88' at Powell & 1046.41' at Mead
- August is Tier Determination, Current Estimate is Tier 2A Reduction
- Bushing Fire-Hoover Transformer Affects A-5 & A-6 Generation Temporarily
- Hoover Waste Site Semi-Annual Report Submitted & Soil Testing Plan
- BOR Awards \$865K for Drought Contingency Planning, Kingman Gets \$100K
- DOI Exploring Wind Energy Options off SW Coast of Louisiana

## **California**

- IID & MET Expected to Put Forth Drought Mitigation Plan by August 18<sup>th</sup>
- Expected Targets of 400-500K AC-Ft in Fallowing or Other Conservation
- 67 MW CCA Project (Mountain View Wind Repowering Project) Online
- Project Replaces 100 Old Turbines with 16 New Ones (257 GWH/Year)
- CPUC Seeks Comment About Adding Hydrogen To Natural Gas Stream
- 45 Mile Underground Water Tunnel, 50 Years in the Making, Will Take Water from Northern California to So. Cal at @ \$16B Cost
- IF Supported Politically, Won't Break Ground Until 2028 & Take Decade+
- Fallowing Likely to Double Next Year from 400K AC to 800K AC

## **CoBank – The Quarterly (July 2022)**

- Ukraine War Impacts, Commodity Prices Lost Upward Momentum
- Replenishing Grain/Oilseed Globally Will Require 2 Growing Seasons
- Supply Chain Still Broken, Fewer & Faster Export Shipments from China
- Slightly Lower Transportation Price Inflation & Availability Improved
- Ships from CA to Asia Return Empty 70% of the Time (2022 Q1)
- Shipping Prices have Dropped 20% (April to June)
- Ships Waiting to Unload at Port of Los Angeles Fell 45%
- Recession in Europe Indicative of Things to Come in the US
- Decline for Goods will Accelerate, Allowing Supply Chain Recovery

- Expected Fed Increase of 75 Basis Points in July, 50 to 75 in September
- Q1 GDP Growth -1.5%, Q2 Estimated at -1%, Indicating Recession
- Value of US Dollar at 20-Year High
- Grains Dropped 32% from May (\$13/Bushel) to July 22 Futures
- Fertilizer Prices Pulled Back Recently, but still Up 10%-15% YTD Thru May
- Biofuels (Ethanol, et. al) Production of 15.5B Gallons
- Avg. Margins Favorable at 33 Cents/Gallon Compared to 22 Cents Typically
- Meat Prices 20% Higher than the 5-Year Average
- 40M Birds to HPAI Impacting Poultry Pricing
- Higher Inputs Costs Leading to Higher Slaughter Rates for Beef (16% YOY)
- Pork Pricing 30% Higher than Last Year, Head Count Down 1% (Last Year)
- Pork Exports Down 19% YOY (China Taking Less Exports)
- Milk Herd Estimated at 102K Head Short Versus a Year Ago
- Despite Record High Milk Prices, Only Minimal Expansion Expected
- Growth Limited to TX & SD Where Feed is Self-Supplied (Vert. Integration)
- Cheese Inventories at Record Highs, While Butter Inventories Remain Tight
- Retailers Switching to Lower Price & Private Label Cheese
- US Cheese & Butter Still Priced Below Global Competitors
- December 2022 Cotton Futures Down 35% from mid-May Highs
- Retail Clothing Sales Jumped 15% from Last Year
- Imported Fruit & Vegetables Expected to Increase - US Water Shortages

### **Colorado River Energy Distributors Association**

- Despite Summer/Monsoonal Precipitation, Runoff Still Below Average
- Annual Inflow to Lake Powell now at 5.96 MAF, Up 4% from June Forecast
- UC & San Juan RIP Programs Included in HR 5118
- Non-Native Smallmouth Bass Showing Up Downstream of GCD
- WAPA Biologist Recommends Bug Flows Experiment be Stopped this Year

### **Department of Energy**

- DOE & DOT Working Jointly to Research EV Truck Stop Locations

- NOI to Provide \$225M to Update State & Local Building Energy Codes
- Senators Ask DOE & EPA to have Crypto Miners Report Energy & Emissions
- DOE to Loan GM & LG Chem \$2.5B to Build 3 Plants in TN, OH & MI
- DOE Selects Idaho for New Sodium Cooled Nuclear Versatile Test Reactor
- \$165M Investment in Geothermal Planned by DOE

## **Electric Vehicles**

- DOE & DOT Working Jointly to Research EV Truck Stop Locations
- 2 EVs Would Use 4X the Energy of US Average Air Conditioning Demand
- Biden Administration Targeting 50% EVs Sold by 2030
- Demand Could Increase from 11B KWh Today to 230B KWh in 2030
- 2030 Demand is Equivalent to 5% of Today's Load
- 30M Chargers Needed, with 1.2M being Public Chargers
- GM, Pilot & EVgo to Build 2K Charging Stalls at 500 Pilot Stations
- DOE Spending \$96M to Electrify Tractors, Construction Equipment, Etc.
- DOE/DOT Announce All 50 States have Submitted EV Charging Plans
- House Democrats Looking to Include Broadband in Charging Network
- As Gas Prices Fall, Apparently so is Interest in Electric Vehicles

## **Environmental Protection Agency**

- *WV. vs. EPA* - Best System of Emission Reduction not in EPA Authority
- EPA Adds Five PFAS to the Toxic Release Inventory
- Seeking Public Comment @ \$250K Waiver Limit for BABA
- Lead and Copper Rule Revisions Require Water Systems to Prepare and Maintain an Inventory of Service Line Materials by October 16, 2024
- AOC Introduced Bill Giving EPA Power(s) Taken by SCOTUS WV Ruling

## **FERC**

- Rep Casten (D-IL) Introduced 2 Bills to Have FERC Undertake 2 Rulemakings
- One Would Require RTOs/ISOs Transparency & Participation Modifications
- Second - Require Minimum Transfer Capabilities Between Planning Regions

- FERC Reverses Order for Public Power Entities Based on Lack of Authority
- FERC/NERC Request Forum for Electrical & Natural Gas Coordination
- Several States Urging FERC to Require Minimum Transfer Capabilities
- Hope that it Could Lead to More Multistate Power Lines Being Developed
- House E&C Question FERC @ Hydropower Permitting Reform (AWIA 2018)

## Financial Focus

- Probability of Recession Estimated at 45.7% (Bloomberg)
- Signs of Recession include Global GDP going from 3.5% to 3% this year
- US GDP Growth Estimated at 2.1%, Down from 5.7% Last Year
- China GDP Growth Estimated at 3%, Down from 8.1% Last Year
- S&P YOY Return at Negative 17%
- Dollar Up 10% Over Last Year & Up 45% Over Last Decade, Affecting Exports
- If Recession, Unemployment to Go to 6+%, But will be Short & Shallow
- \$40B Invested in Data Centers Last 12 Months, Increasing Capacity Demand
- Bank of England Predicts Inflation to Peak at 13.3% in October
- Also Predicting it Will Enter Recession in Q4 2022, Lasting 5 Quarters
- Arizona Housing Shortfall Est. to be 96K, Home Prices up 40% in 18 Months
- 2 Year to 10 Year Yield Curve Inversion Indicative of Recession
- Retail Sales (Down 0.3%), Consumer Confidence, Housing, Start-Up Funding (Down 23%), Stock Market (Down 19%), Copper (Down 20%), Oil, Bond Market All Support Recession Fears
- Energy Prices May Keep Inflation High for Years

## Industry Update

- \$2.1T Investment Needed by 2030 to Put US on Near Zero Emission Path
- 4K TWh in 2020 Could go to 5-7K TWh in 2050 According to NREL Study
- NuScale Received SMR Design Certification from NRC
- ISO-NE Tripling to \$153/MWh, Up from \$50/MWh Last year
- US Residential Rate Increase of 4.3% in 2021 & 3.9% in 2022

- New Solar Roof Manufacturing Facility In Georgetown, Texas
- NY Issues Solicitation To Purchase At Least 2,000 MW Of Offshore RECs
- PG&E & Tesla Looking at Virtual Plant w/ 25K Powerwalls for Peak Shaving
- PG&E Willing to Pay Customers \$2/kWH for Demand Response
- Currently 1,500 Customers Enrolled, Equivalent to 8-10 MW of Capacity
- Global Copper Demand will Double to 50M Tons/Year by 2035 for EVs, Batteries, Wind, Solar Components & Power Lines for Electrification
- Nuclear & Hydrogen Industry Form Nuclear Hydrogen Initiative,
- 40-Member Coalition Would Support Hydrogen made with Nuclear
- Clean Energy Installations Down 55% from Q2 Last Year
- Renewable PPAs Increased 30% YOY (Wind 33.7% & Solar 25.4%)
- NJ Investing \$500K in Wave & Tidal Energy Study & Pilot Program
- Energy Storage Rose from 1.4GW (2020) to 4.6 GW in 2021
- EIA States Nearly 60% Used for Price Arbitrage (2021) up from 17% (2019)

## Markets

- Colorado Springs Joins SPP
- Western Markets Exploratory Group Expands to 25 Members
- ISO NE Needs to Raise Reserve Margins by 300% by 2040 for Renewables

## Meetings

- APPA Advisor Meeting – July 25<sup>th</sup> to 27<sup>th</sup> – Park City
- Meeting with Darrin Francom, CAP – August 1<sup>st</sup>
- AOP 2<sup>nd</sup> Consultation – August 2<sup>nd</sup>
- Meeting with Doug Milligan, SRP – August 3<sup>rd</sup>
- NWRA Federal Affairs Committee Meeting – August 5<sup>th</sup>
- IEDA Executive Committee Meeting – August 9<sup>th</sup>
- Arizona Farm Bureau – Maricopa County Meeting – August 10<sup>th</sup>
- Meeting with Ben Engelby, AEPCO – August 11<sup>th</sup>
- ABWC Strategic Planning Meeting – August 18<sup>th</sup> to 19<sup>th</sup> – Prescott
- CoBank Water & Energy Conference – August 30<sup>th</sup> to September 1<sup>st</sup>

- Annual Operating Plan (Virtual) – September 7<sup>th</sup>
- CREDA-Denver – September 12<sup>th</sup> & 13<sup>th</sup>
- Technical Review Committee – Las Vegas – September 14<sup>th</sup> & 15<sup>th</sup>
- ABWC Annual Conference – September 16<sup>th</sup>
- DC Lobbying Trip – September 19<sup>th</sup> to 22<sup>nd</sup>

## **Natural Gas & Oil**

- West Texas Crude Decline to \$94/Barrel
- National Gas Price at \$4.88/Gallon Compared to \$3.10/Gallon a Year Ago
- IRA Resets Royalty Rate of 12.5% to 16.7% for Oil & Gas on Public Lands
- Keystone Pipeline Returned to Full Capacity After Electric Substation Repair

## **Transmission**

- BLM Approved Construction of the Ten West Link Transmission Line Project
- MISO Approves \$10.3B in 18 Transmission Projects
- WAPA Approves Interconnection Of 504-MW Wyoming Wind Project
- Pattern Energy Buys Proposed 3-GW SunZia - Wind Energy from NM to AZ
- 550 mi - 525 kV Bi-Directional Line & Wind Turbines Expected to Cost \$8B
- Second 500 kV AC Line Planned
- BLM Authorized Construction of Line from AZ to CA Last Month
  - Ten West Link (125 mi) 500 kV/3,200 MW Capacity from AZ to Blythe
- TransWest Express Submits Application to Join CAISO Balancing Authority
- TWE is a 732 mi Line w/ HVDC & HVAC Segments from WY to UT

## **Washington DC**

- Schumer, Manchin Announce \$369 Billion Energy Security, Climate Deal
- Public Power Would Gain Access to Direct Payment for Tax Credits
- Solar Now Qualifies for Production Tax Credit Option
- Deal Includes Promise of Permitting Reform & Mountain Valley Pipeline
- Sinema Signs Off w/Fix to Tax Loophole & \$4B Added to Drought Mitigation
- Further Negotiations Scaled \$5B Closer to \$1B to Colorado River Help

- New Hydropower Credit Extended 10 Yrs & New Energy Storage Tax Credit
- Existing Hydropower Again Overlooked in Package
- Nuclear Gets \$30B Lifeline, Extending Plant Life or Preventing Early Closure
  - 22%-38% of 93 Nuclear Reactors Planned to Close in 2030s
- Flurry of Floor Amendments Occurred During Vote-A-Rama
- House E&C Sends Letter to EPA Regarding Electric Reliability
- O'Halleran Introduced Legislation Expanding Predator Support Programs
- Manchin Calls for Regulatory Certainty Regarding Hydrogen Pipelines
- SWPA "Revolving Fund" Bill Heard in Senate ENR Hearing
- S. 3856 Proposed Ban on Importing Russian Uranium
- "Fueling Our Nuclear Future Act of 2022," S. 4066 (Barrasso), Supports National Production of Enriched Uranium for Advanced Nuclear Reactors
- Estimated that 50% of Enriched Uranium Comes from Russia
- CHIPS Plus (Former COMPETES Act) Bill Passed House & Senate
  - Bill Helps Semiconductor in US, Possibly Significantly Helping Arizona
  - Transformer Reserve & PURPA "Must Consider" Storage Dropped
- Senate Approved WRDA 93-1
- FEMA -\$2.3B for 2023 Building Resilient Infrastructure & Communities
- Daines & Feinstein Introduce Hydro Retrofit Bill
- House Lawmakers Form Caucus Focused on Disaster Prep & Recovery
- AOC Shopping H.R. 8395 to give EPA Broad Climate Authority (GHG)
- Manchin Wants to Form Independent Agency for Nuke Waste Management

### **Wildfires (Senate & House Committee Meetings)**

- Administration Included \$2.5B Over 10 Years for Wildfire Reduction
- \$407M of \$1.5B in IJA for Wildfires has been Distributed
- Currently 5M Acres Burned with 80 Large Fires Currently Burning
- 85% of Forest Owners Don't Have a Management Plan
- Good Neighbor Act Needs Expanding
- Currently there are 800 Trees/AC in US Forests
- House Passes Wildfire Response & Drought Resiliency Act
- Increases Pay (\$20/hr minimum) & Included @\$4B for Salary & Expenses
- Required Development of 10-YR National Wildfire Plan



- Provides for Prescribed Western Fire Training Centers
- Firefighters Slow Growth of California Blaze Near Yosemite
- Reforestation Plan Includes Planting 1B Trees on 4K Acres
- Department of Agriculture - \$1B in Grants for Wildfire Preparedness
- Western Neb. Wildfire Prompts Evacuations, Burns Homes
- McKinney Fire in CA burns More than 57.5K Acres