

The Colorado River Commission of Nevada (Commission) meeting was held at 1:31 p.m. on Tuesday, December 10, 2019 at the Grant Sawyer State Office Building, 555 E Washington Avenue, Room 4412, Las Vegas, NV 89101.

**COMMISSIONERS IN ATTENDANCE**

Chairwoman	Puoy Premsrirut
Vice Chairwoman	Kara J. Kelley
Commissioner	Marilyn Kirkpatrick
Commissioner	Allen J. Puliz
Commissioner	Dan H. Stewart
Commissioner	Cody T. Winterton

**COMMISSIONER(S) NOT IN ATTENDANCE**

Commissioner	James B. Gibson
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**DEPUTY ATTORNEY(S) GENERAL**

Special Counsel, Attorney General	Christine Guerci
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**COMMISSION STAFF IN ATTENDANCE**

Executive Director	Eric Witkoski
Senior Assistant Director	Sara Price
Chief of Finance and Administration	Douglas Beatty
Assistant Director of Energy Information Systems	Kaleb Hall
Assistant Director of Energy Operations	Michael Slattery
Assistant Director of Energy Services	Gail Bates
Assistant Director of Engineering and Operations	Bob Reese
Manager, Natural Resources Program	Angela K. Slaughter
Assistant Hydropower Program Manager	Lisa Ray
Senior Energy Accountant	Gail L. Benton
Senior Energy Accountant	Stephanie Salleroli
Natural Resource Specialist	Rebecca Suafoa
Natural Resource Analyst	Peggy Roefer
Natural Resource Analyst	Warren Turkett, Ph.D.
Office Manager	Gina L. Goodman
Administrative Assistant IV	Katie Aguilar
Administrative Assistant IV	Kira Bakke
Administrative Assistant III	Kristina Perry

**OTHERS PRESENT; REPRESENTING**

NV Energy	Michael Hulin
Overton Power District 5	MeLisa Garcia

**COLORADO RIVER COMMISSION OF NEVADA  
MEETING OF DECEMBER 10, 2019**

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The Colorado River Commission of Nevada (Commission) meeting was called to order by Chairwoman Premsrirut at 1:31 p.m. followed by the pledge of allegiance.

**A. Conformance to Open Meeting Law.**

Executive Director, Eric Witkoski confirmed that the meeting was posted in compliance with the Open Meeting Law.

**B. Comments from the public. (No action may be taken on a matter raised under this item of the agenda until the matter itself has been specifically included on an agenda as an item upon which action will be taken.)**

Chairwoman Premsrirut asked if there were any comments from the public. There were none.

**C. For Possible Action: Approval of minutes of the August 13, 2019 meeting.**

Commissioner Winterton moved for approval of the minutes. The motion was seconded by Vice Chairwoman Kelley and approved by a unanimous vote.

**D. For Possible Action: Consideration of and possible action to adjust the amount of collateral the Commission's retail industrial customers are required to post for Calendar Year 2020 pursuant to their contracts with the Commission.**

Assistant Director of Energy Services, Gail Bates explained that NRS 538.181(2) requires that the Commission's power contractors provide collateral "in such sum and in such manner as the Commission may require, conditioned on the full and faithful performance" of their power contracts. The related regulation, NAC 538.744 requires "during October of each operating year, and at any other time it deems necessary, the Commission will conduct a review to determine creditworthiness of each of its contractors." Based on that annual review, the Commission establishes the amount and prescribes the way the contractor is required to furnish collateral pursuant to its contracts with the Commission.

To determine the collateral required for each industrial contractor for Calendar Year 2020, Staff per the regulation, calculated the minimum collateral requirement which is 25 percent of that contractor's Gross Annual Purchases for the test period of October 1, 2018 through September 30, 2019. The Contractor's "Gross Annual Purchase" reflects the Contractor's power and related expenses during the test period and does not include revenues that might become available to the contractor to offset those expenses. Staff also reviewed each customer's payment history and determined if the collateral should be set at the minimum of 25% or should be set at a higher amount.

Based on its review, Staff recommended that the collateral requirement for each of its retail contractors be set at the minimum collateral requirement except for EMD Acquisition, LLC., to be set as follows:

Contractor	Minimum Collateral Requirement	Recommended Collateral Requirement	Present Collateral	Change from Present Collateral
Basic Water Company	\$270,983.82	\$270,983.82	\$192,163.71	\$78,820.11
LHoist North America	\$18,978.84	\$18,978.84	\$18,888.50	\$90.34
EMD Acquisition LLC	\$520,765.80	\$750,000.00	\$750,000.00	\$0
Olin Chlor Alkaline Products	\$77,023.62	\$77,023.62	\$83,237.14	(\$6,213,52)
Titanium Metals Corporation	\$2,693,081.13	\$2,693,081.13	\$2,330,005.09	\$363,076.04

In respect to EMD's collateral, the level required was approved just over a year ago by the Commission in Sept. of 2018 as a condition of EMD's acquisition of Tronox, LLC. Staff recommendation at that time, was based on the facts that EMD was a startup company, had no operating history or credit rating and was part of a series of Limited Liability Companies that appeared to be thinly capitalized. (See Exhibits A and B). Thus, Staff at that time had no operating history to assess the risk of not being paid for power delivered to EMD.

EMD has operated for just over a year and has had two late payments in the last twelve months. The Commission is a state agency that purchases and sells energy at costs plus a small administrative fee added. Consequently, the Commission is not able to assume risk of non-payment of power sold to customers. Thus, Staff recommends that EMD's collateral be maintained at the present amount.

All the Commission's retail contractors have posted cash collateral except for Titanium Metals Corporation which has posted a letter of credit. Staff recommended no change in the form of collateral being posted.

Ms. Bates indicated that all contractors had been provided the information and Staff's recommendation for the level of collateral. She indicated that EMD inquired about whether the collateral could be lowered and she explained to them with the relatively short operating history and late payments Staff was not recommending lowering the collateral for EMD.

Chairwoman Premsrirut asked if there had been any other feedback from the contractors.

Ms. Bates answered no.

Chairwoman Premsrirut asked about the calculation being basic math.

Ms. Bates replied that was correct.

Commissioner Winterton asked for a reminder of the default provisions.

Ms. Bates responded that the provisions were complicated since the Commission cannot disconnect individual customers. The Commission has requested the customers execute a Right to Access Agreement. Those agreements allow the Commission access to the property with the customer, in order to turn off the power and the Commission would install a lock on the facilities to prevent re-energization.

Once the Right of Access Agreements are completed then sixty days would be the target time for suspension of service.

Commissioner Winterton asked about the Right to Access Agreement for EMD.

Ms. Bates stated that all draft agreements have been sent out, a meeting with each individual customer is still needed to take place to execute the agreements.

Vice Chairwoman Kelley asked if the agreement to enter the property was done simultaneously as the original agreement.

Ms. Bates responded there is a provision in the regulations that states the customers are supposed to enter into some sort of an arrangement for the electrical disconnection.

Mr. Witkoski stated the transaction that was done last year when EMD acquired the assets from Tronox as a condition for the approval that they also had executed turnoff agreement.

Commissioner Winterton asked what the current contract rights are.

Special Counsel, Attorney General, Christine Guerci stated that this issue has been ongoing for several years. Basic Power Company (Basic Power) has the ability to shut off individual customers, but the Commission does not. NAC 538.570 was put in place in June of 2014, and requires that each contractor, that obtains all its electric power from the Commission, must provide the Commission with the ability to physically disconnect the contractor's power for failure to pay a power invoice from the Commission a timely manner, without adversely impacting the delivery of power to other contractors .

In 2017, it was determined, the costs of electrical configuration for shut off, was prohibitively expensive for the companies, Staff tried last year to negotiate with the customers through Basic Power for an arrangement to shut customers off for nonpayment. This approach ultimately failed because of some concern and pushback from Basic Power.

Staff has regrouped and now sent out a letter with Right of Access Agreements (Agreement) similar to what was sent to EMD. The agreement states the customer must provide a schematic of their power system, a person on notice for 24 hours, allow access for turnoff and the Agreements be executed by the end of the year.

Ms. Guerci further stated that there had not been any shut off issues. The Commission could go to court and obtain the order for entry for the land in order to shut off the power. The preference is to have the customer turn the power off and not have the Commission touch the customers equipment. That would be a fallback plan.

Vice Chairwoman Kelley asked for clarification on the enforcement right via the regulation and whether it was to alleviate the expense of having to reconfigure equipment.

Ms. Guerci confirmed that was correct.

Commissioner Winterton asked if it would require a court order.

Ms. Guerci responded that the court order would be required now. Ms. Guerci offered an alternative would be to require them to change their equipment in order to perform the shut off remotely, which is very expensive. The option was given to the customer to sign the right of access or to change the equipment.

Commissioner Winterton stated that encouragement is needed to get the Agreements signed and proposed an incentive of a five percent increase if agreements are not signed.

Ms. Guerci offered that perhaps the correct thing to say would be that the Commission has previously approved a five percent increase if the agreement is not signed.

Commissioner Stewart stated that the deadline was at the end of the year, if not brought back sooner then raise the collateral.

Commissioner Puliz asked if there was anything in the regulations that stated companies should be capitalized to a safe amount.

Ms. Bates responded no, the Commission does not have procedures that are that stringent.

Mr. Witkoski stated it was more of a condition when EMD was one of the buyers from Tronox, which is why the Commission asked for thirty percent.

Commissioner Puliz asked if the thirty percent was in the form of a bond.

Mr. Witkoski stated that for this particular customer it was cash.

Ms. Bates affirmed that three out of four customers were cash and Timet has a letter of credit.

Commissioner Stewart asked if there had been any instance in the past where a customer had been shut off.

Ms. Bates stated that she was not aware of a time that a customer was shut off.

Commissioner Stewart asked about the cause of starting the disconnection process.

Ms. Guerci answered that the Commission has sixty days. When a payment is late, the Commission is notified, and contact is attempted. If payment is not received within four days, a notice of non-performance is sent which gives the customer fifteen days to pay. The notice also explains how to correct things or to talk to the Commission after that fifteen days has passed. After the fifteen days, a notice of suspension is prepared by the legal department and it gives the customer three days to pay or suspension will commence. Depending on the customer, the Commission could go to the property and turn it off with the Right of Access Agreement. If there is not a Right of Access Agreement, the matter would go to court to obtain permission to enter the land and shut off the power. After the three days have past, the customer does have a thirty-day appeal period. Shut off would be at the twenty-five-day mark, and if the

customer had an appeal which must be heard within thirty days and takes the duration out to sixty days.

Commissioner Stewart clarified that the sixty-day time frame was all inclusive.

Chairwoman Premsrirut asked for additional questions or comments from the Commissioners.

Commissioner Kirkpatrick requested a status check be added to the item approval before the increase is put into effect.

Commissioner Winterton agreed that the status check before the increase was imposed should be on the record.

Ms. Guerci clarified that the motion could be approved with the amount as set as well as asking the Executive Director to bring the item back in three months to ensure compliance with the right of access agreements.

Chairwoman Premsrirut clarified that there was a motion of approval with the prescribed collateral as well as a request for the Executive Director to bring the item back in three months for a status check with notice to the contractors that these right of access agreements need to be buttoned down or they could potentially face a ten percent increase on the collateral.

**Commissioner Winterton moved for approval of the item with a request to have the item brought back to the Commission in three months. The motion was seconded by Commissioner Kirkpatrick and approved by a unanimous vote.**

**E. *For Possible Action:* Consideration of and possible action to approve the intervention of the CRCNV in Save the Colorado, et al. v. U.S. Dept. of Interior, Case no. 3:19-cv-08285-MTL (D.Az 2019).**

Senior Assistant Director, Sara Price gave a PowerPoint presentation.

On October 1, 2019, plaintiffs Save the Colorado; Living Rivers and Center for Biological Diversity sued the United States Department of the Interior (DOI) and David Bernhardt, Secretary of the Interior in federal court in Prescott, Arizona.

Plaintiffs:

- Save the Colorado, a non-profit 501(c)(3) whose stated purpose is the protection and restoration of the Colorado River and its tributaries;
- Living Rivers, a non-profit 501(c)(3) whose stated purpose is to help heal river ecosystems by mobilizing public support and involvement for large-scale river restoration; and
- Center for Biological Diversity, a non-profit 501(c)(3) whose stated purpose is to secure a future for all species, great and small, hovering on the brink of extinction through science, law and creative media, with a focus on protecting the lands, waters and climate that species need to survive.

Background:

The plaintiffs are seeking to invalidate the 2016 Long-Term Experimental and Management Plan (LTEMP) which updates Glen Canyon Dam's 1996 operating plan, with an eye toward maximizing electricity generation, meeting needs of downstream water users and protecting the environment inside the Grand Canyon. The plaintiffs assert that the DOI did not properly account for climate change and did not fully analyze alternatives, such as decommissioning the Glen Canyon Dam. Specifically, the Record of Decision (ROD) and its underlying Final Environmental Impact Statement (FEIS) allegedly significantly undervalue projections of climate change impacts and do not properly consider potential detrimental effects of climate change resulting in an inadequate range of alternatives being considered. Further consideration of the generation of hydropower was inappropriate because of specific level of hydropower production is not required by federal law.

Claims Asserted:

The claims asserted are alleged violations of the National Environmental Policy Act (NEPA) and the federal Administrative Procedure Act (APA).

- Claim Three: The DOI's failure to consider a reasonable range of alternatives was in violation of the APA and not in accordance with NEPA.
- Claim Four: The failure of DOI to produce a Supplemental Environmental Impact Statement (SEIS) in response to recent research showing potential water scarcity in violation of the APA.
- Claim Five: The failure of DOI to explain possible conflicts between guidance documents and proposed actions was in violation of the APA and not in accordance with NEPA.

The Commission's interest:

The Commission as an allottee of hydropower from the Glen Canyon Dam has an interest in seeing hydropower production considered in long term planning. Staff of the Commission worked diligently on the LTEMP process and need to monitor the progress of this lawsuit. It is not expected to require the retention of outside counsel as other state agencies are expected to intervene along with the CRCNV.

Commissioner Kirkpatrick stated her support and began to make a motion for approval.

Commissioner Stewart seconded the motion.

Chairwoman Premsrirut recognized Commissioner Winterton.

Commissioner Winterton asked about the other defendants and whether the Commission is a third-party beneficiary.

Ms. Price clarified that the Commission is a beneficiary and expressed the interests.

Commissioner Winterton asked if the matter had been discussed with Southern Nevada Water Authority (SNWA).

Ms. Price confirmed that the Commission has been discussing the matter with SNWA and that the work is in concert.



A copy of the presentation is attached and made a part of the minutes. (See Attachment A.)

**Commissioner Kirkpatrick moved for approval of the item with a request to have the item brought back to the Commission in three months. The motion was seconded by Commissioner Stewart and approved by a unanimous vote with a request from Chairwoman Premsrirut for a general briefing for strategies at the next Commission meeting on the litigation without waiving attorney client privilege.**

**F. *For Information Only:* Update on the activities of the Financial and Audit Subcommittee.**

Chief of Finance and Administration, Douglas Beatty stated that there had not been any meetings of the Financial and Audit Subcommittee since December 11, 2018.

The next Financial and Subcommittee meeting would be to discuss the audit that is substantially complete. The results would be brought back before the Commission at the next meeting.

**G. *For Information Only:* Update on pending legal matters, including Federal Energy Regulatory Commission or Public Utilities Commission of Nevada filings.**

Special Counsel, Attorney General Christine Guerci provided an update.

Navajo Nation v. Dept of the Interior:

The Navajo attempted to file a Third Amended Complaint which they asserted better outlined the breach of trust by the federal government. The District Court in Arizona denied the motion and dismissed the case. The Navajo have now appealed that ruling to the 9<sup>th</sup> Circuit Court of Appeals. Briefs will be due early next year.

FERC Matters:

The CRCNV has intervened in two related matters before the Federal Energy Regulatory Commission. Pumped Hydro Storage LLC has filed two Applications for Preliminary Permits to build hydro facilities on Navajo land. The Little Colorado River Project and the Salt Trail Canyon Projects are seeking to build dams and other structures.

The location of these projects near the confluence of the Little Colorado River and the Colorado River is problematic. This area supports the largest remaining population of the humpback chub in the world. The Little Colorado River is the only known spawning population of the endangered humpback chub in the Grand Canyon.

Numerous other entities have also intervened or commented including several Native American tribes, the Department of the Interior and Arizona Fish and Game

with the majority expressing concerns over the projects' locations due to potential adverse impacts to native American sacred places, impacts to the Chub, and impacts to water flows.

The Commission has intervened through Special Counsel at no additional cost and will be monitoring the progress of the Applications.

**H. *For Information Only:* Status update from Staff on the hydrological conditions, drought, and climate of the Colorado River Basin, Nevada's consumptive use of Colorado River water, the drought contingency plan, impacts on hydropower generation, electrical construction activities and other developments on the Colorado River.**

### **Hydrology Update**

Natural Resources Analyst Dr. Warren Turkett gave a status update on the hydrologic conditions, drought, and climate of the Colorado River Basin, Nevada's consumptive use of Colorado River water, and other developments on the Colorado River.

- Summary of Lake Powell, Lake Mead, and Nevada Water Supply
- Precipitation and Temperature
- Upper Basin Snowpack Accumulation
- Water Use in Southern Nevada
- Unregulated Inflow, Current and Projected Reservoir Status

A copy of the report is attached and made a part of the minutes. (See Attachment B.)

### **Power Delivery Update**

Assistant Director of Engineering and Operations, Robert Reese presented an overview and update on the power delivery project.

- Power Deliver Overview
- Safety/Safety Training
- Procedures
- Outside resources
- Projects

A copy of the presentation is attached and made a part of the minutes. (See Attachment C.)

**I. Comments from the public. (No action may be taken on a matter raised under this item of the agenda until the matter itself has been specifically included on an agenda as an item upon which action may be taken.)**

Chairwoman Premsrirut asked if there were any comments or questions from the public. There were none.

**J. Comments and questions from the Commission members.**

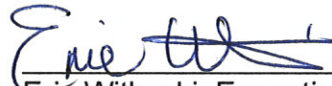
Chairwoman Premsrirut asked if there were any other comments or questions from the commission members. There were none.

**K. Selection of next possible meeting date.**

The next meeting is tentatively scheduled for 1:30 p.m. on Tuesday, January 14, 2020, at the Grant Sawyer State Office Building, 555 East Washington Avenue, Room 4412, Las Vegas, Nevada.

**L. Adjournment.**

The meeting was adjourned at 2:36 pm.



Eric Witkoski, Executive Director

APPROVED:



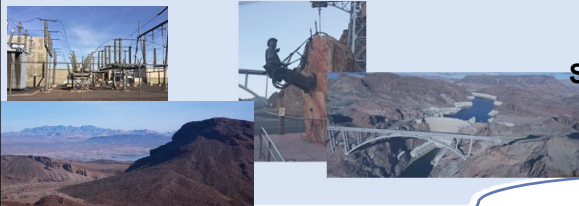
Puoy K. Premsrirut, Chairwoman

# Colorado River Commission of Nevada (CRCNV)

## ***Save the Colorado River et. al. v. U.S. Dept. of Interior (LTEMP litigation)***

**Eric Witkoski**  
Executive Director

**Sara Price**  
Senior Assistant Director  
December 2019



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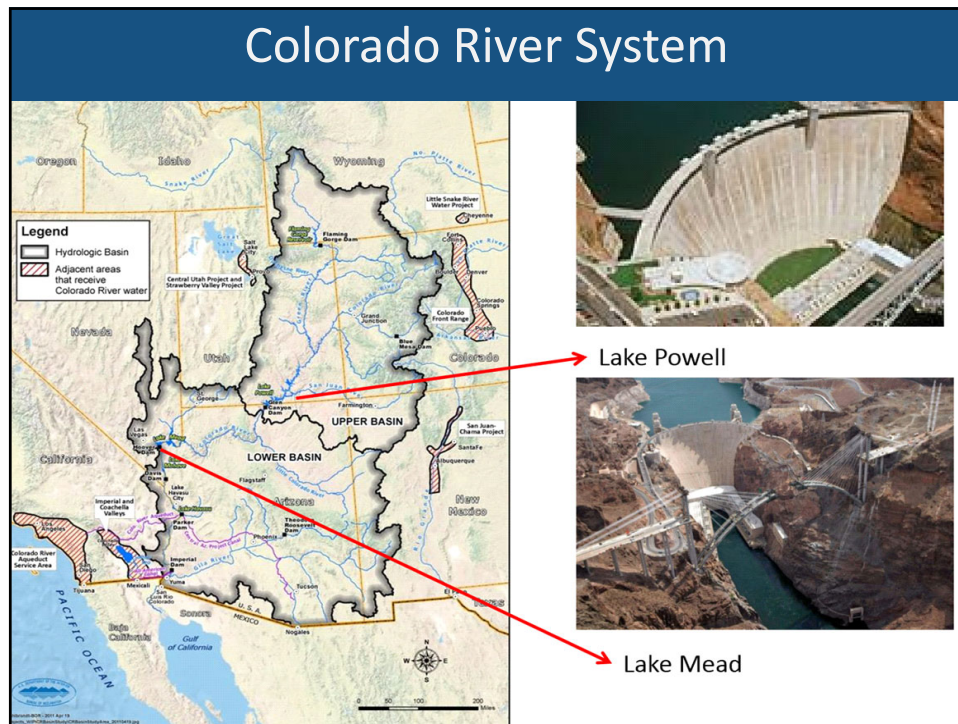
## Introduction

On October 1, 2019, three environmental groups sued the United States Department of the Interior and David Bernhardt, Secretary of the Interior, over the Upper Colorado River Basin's Long-Term Experimental and Management Plan (LTEMP) for Glen Canyon Dam.

Federal Defendants filed their answer to the complaint on December 5, 2019, denying all claims.

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## Background of LTEMP

- The United States Department of Interior (DOI) through the Bureau of Reclamation and the National Park Service issued a Final Environmental Impact Statement (FEIS) for Glen Canyon LTEMP on October of 2016.
- LTEMP is a comprehensive framework for adaptively managing Glen Canyon Dam over the next 20 years in compliance with federal statutory obligations under the Glen Canyon Protection Act and other applicable federal law.
- It is designed to protect downstream resources, conserve endangered species, avoid and mitigate impacts to environmental and cultural resources, and protect Tribal interests while meeting the obligations for water delivery and the generation of hydroelectric power.
- Cooperating Agencies who participated in the process; Bureau of Indian Affairs, U.S. Fish and Wildlife Service, Western Power Administration (WAPA), Arizona Game and Fish Department, Colorado River Board of California, SRP, Utah Municipal Power Systems, Havasupai Tribe, Hualapai Tribe, Kaibab Band of Paiute Indians, Navajo Nation, Pueblo of Auni and **Colorado River Commission of Nevada.**

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## Area Potentially Affected by LTEMP

- Lake Powell, Glen Canyon Dam, and the Colorado River downstream system to Lake Mead.
- Primary focus encompasses the Colorado River Ecosystem – Colorado River mainstream corridor and interacting resources.

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## Record of Decision (ROD) Chose Alternative D

- Various operational alternatives were evaluated and Alternative D was chosen because:
  - *“Alternative D best meets the purpose and need and the broadest set of objectives and resource goals of the LTEMP.” ROD p. 2.*
  - *“Alternative D provides the best balance of performance among downstream resource goals of the LTEMP.” ROD p. 2.*
  - *“Alternative D provides the best balance of performance downstream resources to comply with GCPA to protect, mitigate adverse impacts to, and improve the natural and cultural resources and visitor use in GCNP and GCNRA park units while continuing to comply with GCPA 1802 (b) applicable laws” ROD p. 2.*

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## Lawsuit in AZ - Who are the Plaintiffs

**Save the Colorado**, a non-profit 501(c)(3) whose stated purpose is the protection and restoration of the Colorado River and its tributaries;

**Living Rivers**, a non-profit 501(c)(3) whose stated purpose is to help heal river ecosystems by mobilizing public support and involvement for large-scale river restoration;

**Center for Biological Diversity**, a non-profit 501(c)(3) whose stated purpose is to secure a future for all species, great and small, hovering on the brink of extinction through science, law and creative media, with a focus on protecting the lands, waters and climate that species need to survive.

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## What the Plaintiffs Seek and Assert

- Plaintiffs seek to invalidate the 2016 Long-Term Experimental and Management Plan (LTEMP).
- Plaintiffs assert that the DOI did not properly account for climate change and did not fully analyze alternatives, such as decommissioning the Glen Canyon Dam.
- Plaintiffs assert the Record of Decision (ROD) and its underlying Final Environmental Impact Statement (FEIS) allegedly significantly undervalued projections of climate change impacts and did not properly consider potential detrimental effects of climate change resulting in an inadequate range of alternatives being considered.
- Plaintiffs assert the FEIS failed to consider decommissioning the Dam as an alternative.
- Plaintiffs assert further consideration of the generation of hydropower was inappropriate because a specific level of hydropower production is not required by federal law.

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## CRCNV Planned Action

Recommending the Commission intervene in the case and to support LTEMP for the following reasons:

- CRCNV was a cooperating agency in the administrative process and should file to protect its interest.
- Management of the River is most effectively accomplished by the cooperative effort of the states and federal government rather than the courts as proven over the last number of years.
- LTEMP meets federal statutory requirements in a manner that best balances competing interests and needs in the operations of Glen Canyon Dam;
- LTEMP maximizes hydroelectric power generation, which is a vital renewable resource as recognized in 2019 under SB 358; and
- Glen Canyon Dam provides valuable storage to the operations of the Colorado River.

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## Questions?



Eric Witkoski  
Executive Director

Sara Price  
Senior Assistant Director

Christine Guerci Special Counsel

COLORADO RIVER COMMISSION OF  
NEVADA  
555 EAST WASHINGTON AVE., Suite 3100  
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(702) 486-2670

CRCNV Website:  
[crc.nv.gov](http://crc.nv.gov)

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# Colorado River Commission of Nevada

## Hydrology and Water Use Update December 10, 2019




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## Summary

**Lake Powell**

- Water Year 2020 snowpack accumulation is currently above seasonal average.
- Below average precipitation from June to September 2019 has caused dry soil conditions in the Upper Basin.
- Water Year 2020 unregulated inflow is forecasted to be 77% of average.

**Lake Mead**

- In calendar year 2020, Nevada will be required to have a DCP contribution of 8,000 acre feet.
- Lake Mead is projected to decrease about 4 feet by end of next calendar year.

**Nevada Water Supply**

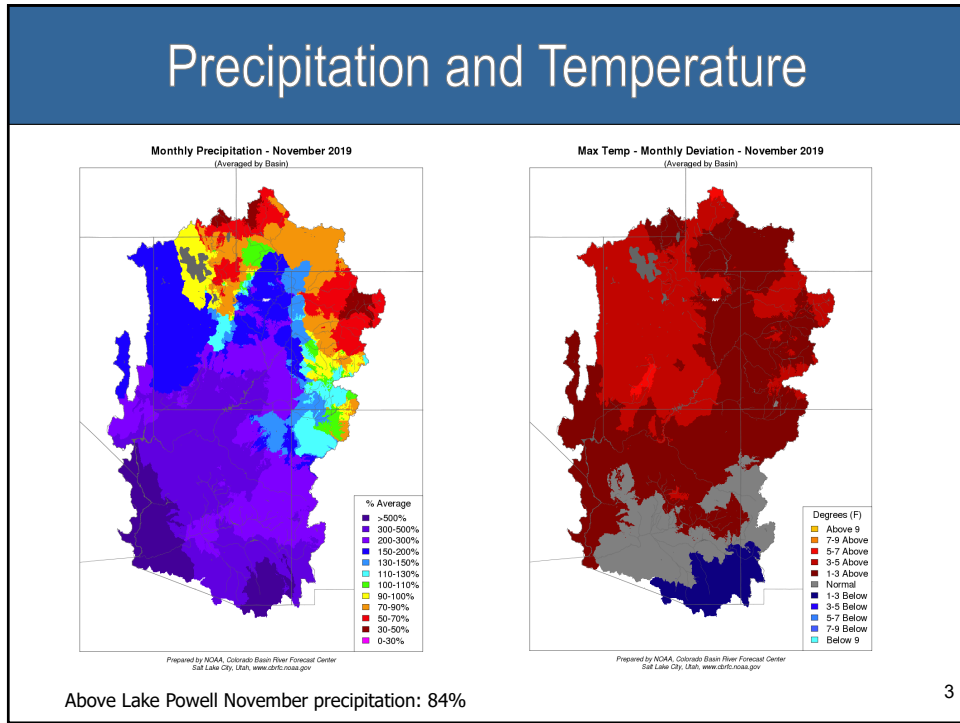
- Southern Nevada has 7 years of water supply banked. <sup>1</sup>
- **In 2018, Southern Nevada used 19% less than its annual allocation.**

Storage	Elevation (f)	% Capacity	Change since last year
Lake Mead	1,084.6	40%	6.4 ft
Lake Powell	3,610.8	53%	25.0 ft

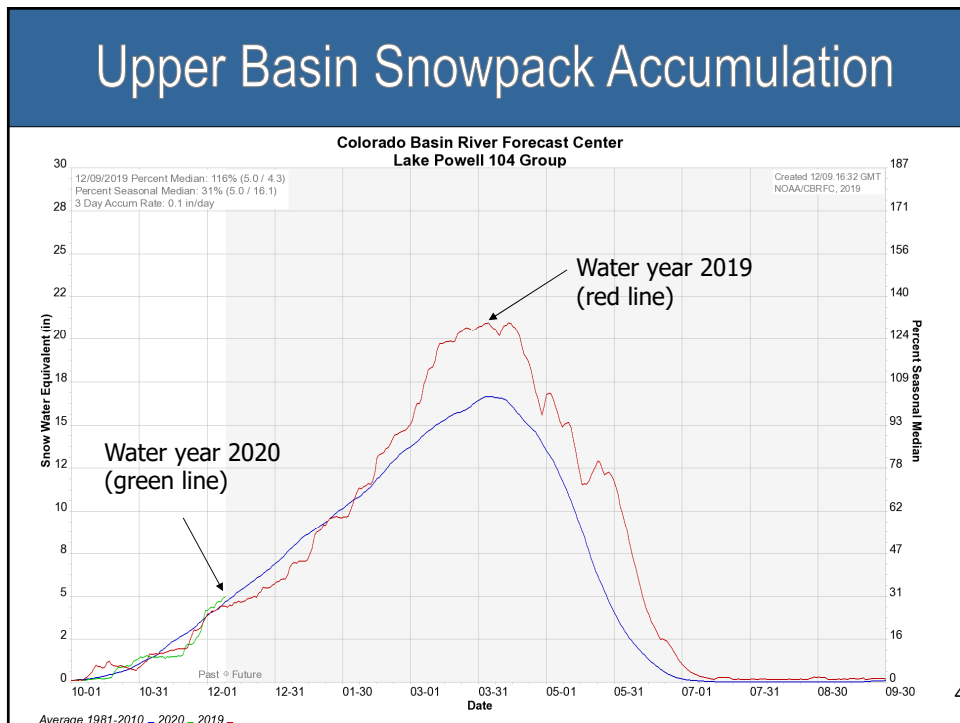
Data retrieved December 5, 2019  
<sup>1</sup> Based on historical Southern Nevada water use.

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## Unregulated Inflow, Current and Projected Reservoir Status

Projected unregulated inflow to Lake Powell      Acre-Feet      % Average

Water Year 2020	8,302,000	77%*
April thru July 2020	5,300,000	74%*

\* 2020 forecast reduced due to below average precipitation and dry soil conditions.

Reservoir	Current Elevation	Current Storage Acre-Feet	Current % Capacity	Projected Elevation on 1/1/2021 <sup>1</sup>
Lake Mead	1,084.6	10,392,000	40%	1,080.4
Lake Powell	3,610.8	12,800,000	53%	3,612.4

Data retrieved December 5, 2019

<sup>1</sup> Based on Reclamation's November 2019 24 Month Study Most Probable Inflow.

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## Water Use In Southern Nevada

**Southern Nevada Water Use**      2018 Actual Use in Acre-Feet

Nevada Annual Allocation	300,000
Diversion	479,279
Return Flows	235,176
Consumptive Use	244,103
Unused Allocation Available for Banking	55,897 (19%)

**Southern Nevada Water Use**      Diversions      Return Flows      Consumptive Use

January-October 2019	410,465	196,457	214,008
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**Banked Water** (through end of 2018)      Acre-Feet

Ground Water Recharge in So. Nevada	358,045
Banked in Lake Mead	700,448
Banked in California and Arizona	943,821
<b>Total</b>	<b>2,002,314</b>

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# The Power Delivery Group

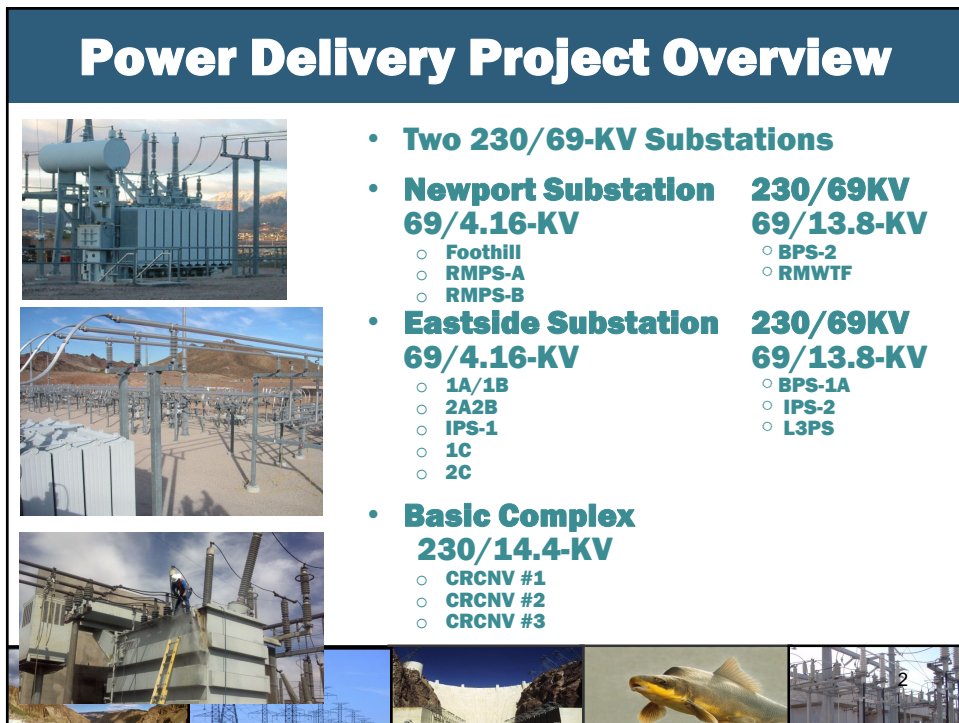


**Robert Reese**  
Assistant Director  
Engineering & Operations

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## Power Delivery Project Overview

- **Two 230/69-KV Substations**
- **Newport Substation 230/69KV 69/4.16-KV 69/13.8-KV**
  - Foothill
  - RMPS-A
  - RMPS-B
  - BPS-2
  - RMWTF
- **Eastside Substation 230/69KV 69/4.16-KV 69/13.8-KV**
  - 1A/1B
  - 2A2B
  - IPS-1
  - 1C
  - 2C
  - BPS-1A
  - IPS-2
  - L3PS
- **Basic Complex 230/14.4-KV**
  - CRCNV #1
  - CRCNV #2
  - CRCNV #3

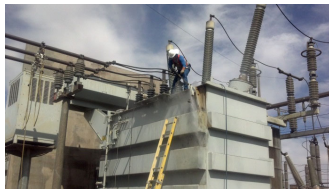


2

## Power Delivery Funding Overview



- **Southern Nevada Water Authority**
- **Basic Industrial Complex Customers**
- **Clark County Water Reclamation District**



3

## Power Delivery Project

- **Approximately 34 miles of 230-KV transmission lines**
- **Newport-Mead 230-KV Line**
- **Eastside-Mead 230-KV Line**
- **Newport-Eastside 230-KV Line**
- **Approximately 5 miles of overhead 69-KV sub-transmission lines**
- **52 Transformers**
- **76 Power Circuit Breakers**
- **Approximately 10 miles of underground 69-KV sub-transmission cable**
- **Total of 30 High Voltage Substations**
- **Current Peak 184 Megawatts**



4

# Safety

- **15,000 Safe man-hours**
- **Over one hundred switching operations**
- **85,000 miles of safe driving**



5

# 2018 APPA Safety Award

Experience the Power...



19<sup>th</sup> Year



6

# Safety Training

- **CPR/1<sup>ST</sup> AID**
- **Job briefing**
- **Grounding**
- **Hearing Conservation**
- **Heat Stress**
- **Safety in Substations**
- **Switching**
- **PPE**
- **MSDS**
- **Defensive Driving**
- **Fire Safety**
- **Fall protection**
- **Tools & Equipment**



7

# CPR/First Aid



8

## Monthly Safety Meetings



9

## Safety

### **PRIORITIES**

- Safety of employees and the public
- Integrity and reliability of the CRCNV power system
- Protection of equipment
- Service to the customer



10



## Healthy Power System



11

## Procedures

- **Switching Procedures**
- **Clearance Procedures**
- **Grounding Procedures**
- **Safety Procedures**
- **Standard Operating Procedures**



12

## Personal Protective Equipment



13

## Personal Protective Equipment



14

## Switching



15

## Outside Activities



16

# Operations Center

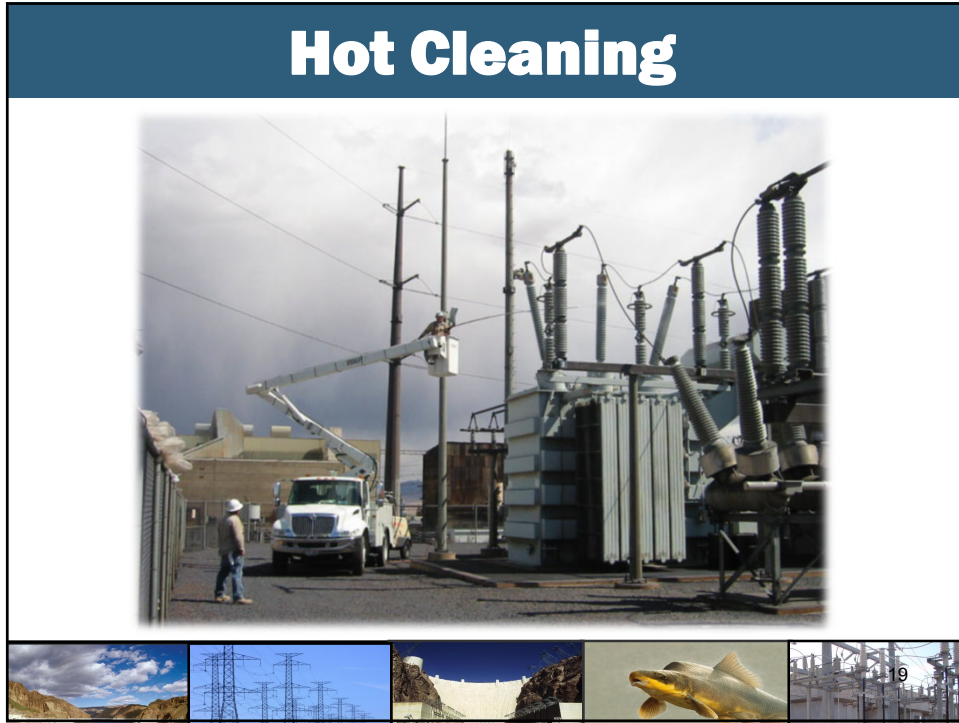


17

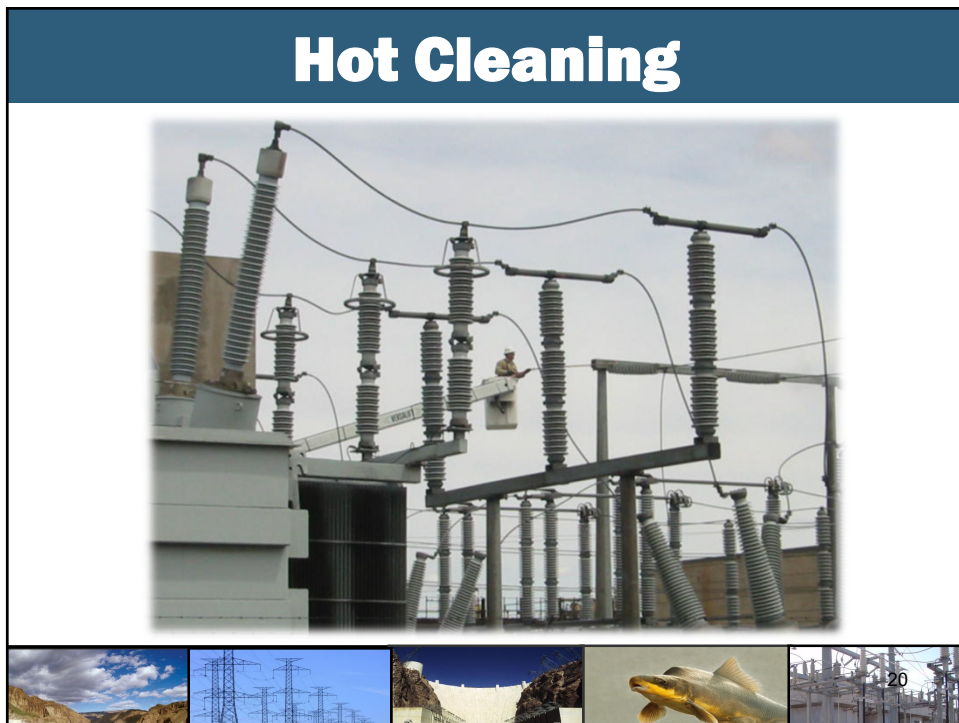
# Preventive Maintenance



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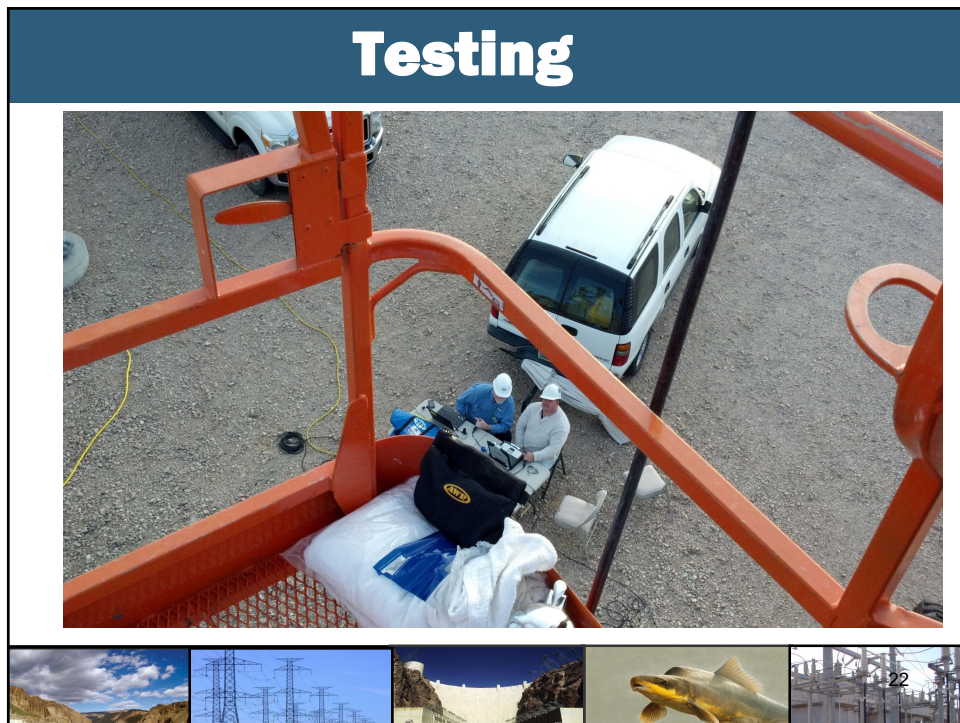
19



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21



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# Outside Resources

## Engineering Contracts

- **Burns & McDonnell** - *O&M and Engineering Support*
- **Doble Engineering Co.**- *Consulting Engineering, Service & Equipment Agreement*

## Labor, Materials and Safety Contracts

- **Energized Substation Maintenance** - *Substation Insulator Cleaning Services*
- **ESCI** - *Safety Training*
- **HD Supply Power Solutions** - *Materials Purchasing Services*
- **PAR Electric** - *Transmission & Distribution System Support Services*
- **Peak Substation** - *Materials Purchasing Services*
- **Anixter** - *Materials Purchasing Services*



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# Outside Resources

## Operation and Maintenance Services Contracts

- **Clark County Water Reclamation District** - *O&M of Electric Facilities*
- **SNWA/CRCNV** - *Electric Power Facilities Development & O&M Agreement*
- **Western Area Power Association (WAPA)** - *O&M & Engineering Support/Mead Substation Interconnection Charge*
- **WAPA** - *Critical Infrastructure Protection MOU*

## Mutual Assistance Agreements

- **City of Boulder City**
- **Lincoln County Power District No. 1**
- **Overton Power District No. 5**
- **Southern Nevada Water Authority**

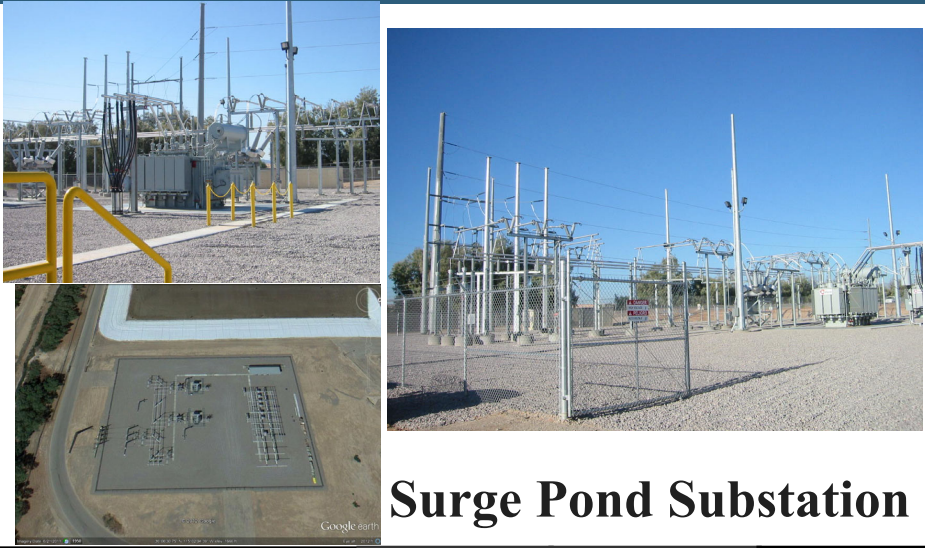
## SCADA Support Contracts

- **Schneider Electric** - *Software Support Services*
- **Schweitzer Engineering Laboratories** - *Substation Automation System Support Services*
- **Survalent Technology** - *Substation Automation System Support Services*



24

## Clark County Water Reclamation District




The image block for the Surge Pond Substation contains several photographs. At the top left, a close-up shows yellow safety railings in front of electrical equipment. To the right, a wide-angle shot shows the substation's metal structures and power lines under a clear blue sky. Below the top-left photo is an aerial view from Google Earth showing the substation's layout within a larger site. The bottom of the block features a horizontal strip of five small images: a landscape with mountains, power lines, a dam, a fish, and a substation component.

### Surge Pond Substation

25

25

## Pumping Plant #3



The image block for Pumping Plant #3 is divided into two main sections. The top-left section, labeled "Before", shows construction workers in safety gear working on a large piece of machinery. The top-right section, labeled "After", shows the completed facility, a large concrete building with a fenced-in area in front. The bottom of the block features a horizontal strip of five small images, identical to the one in the previous block.

Before

After

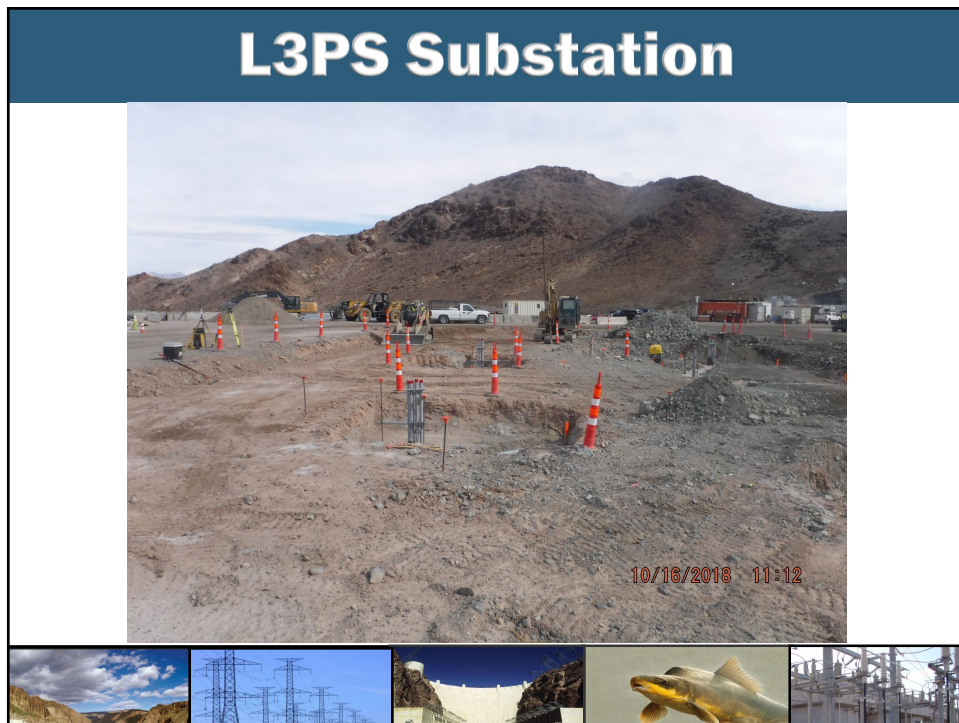
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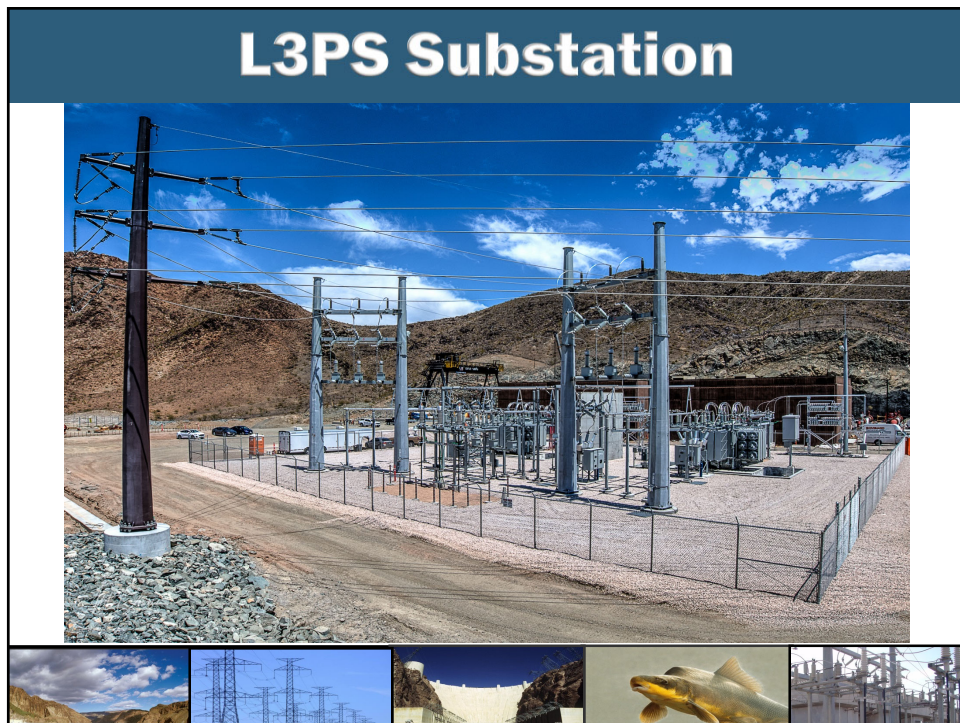


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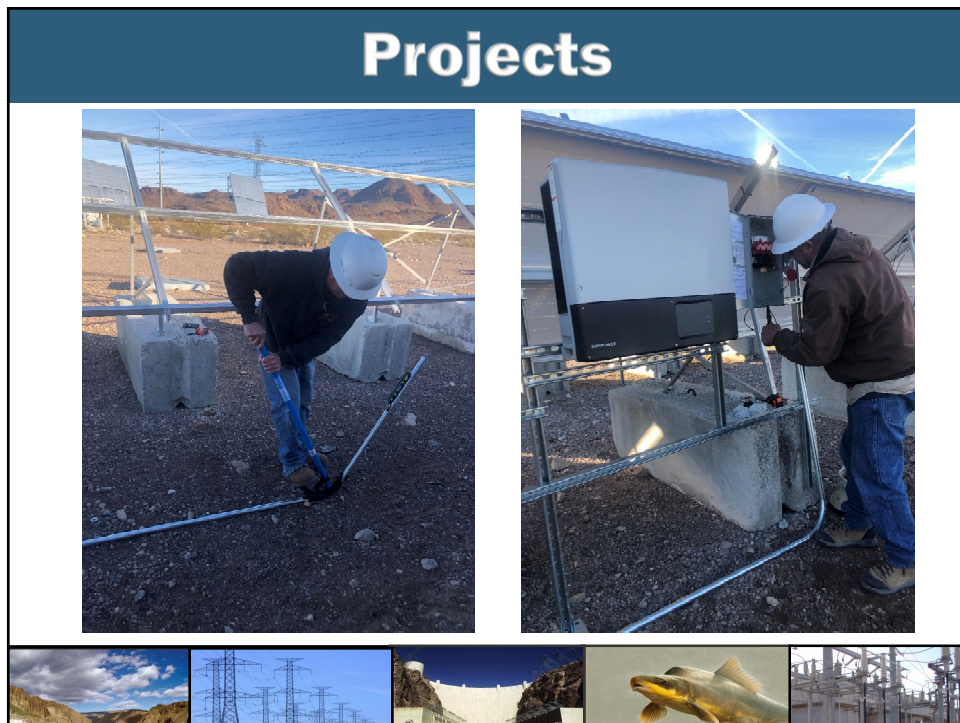
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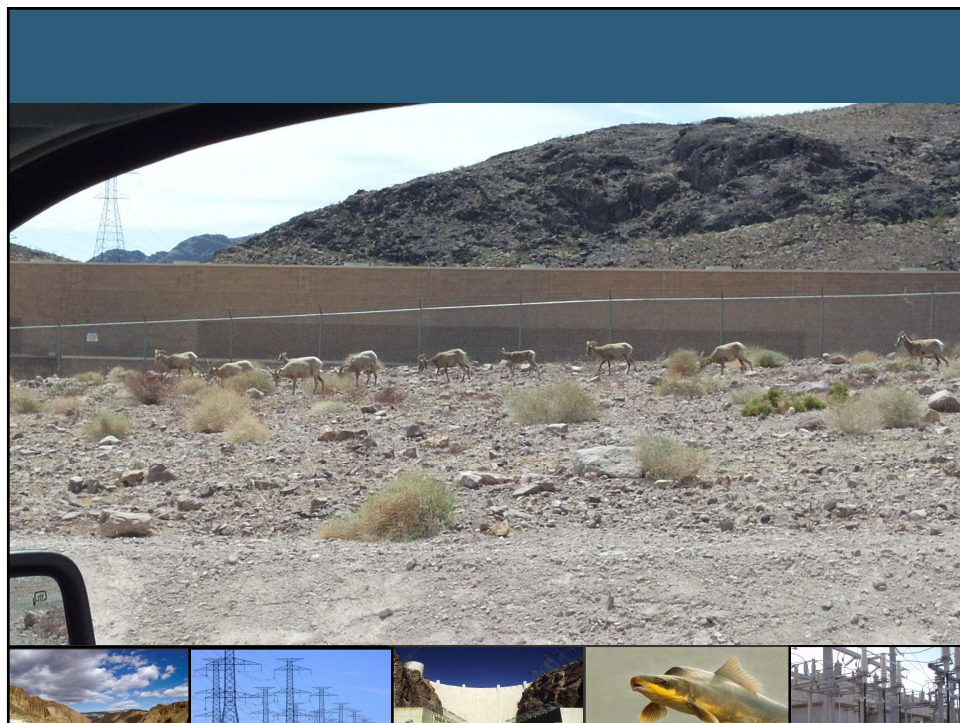
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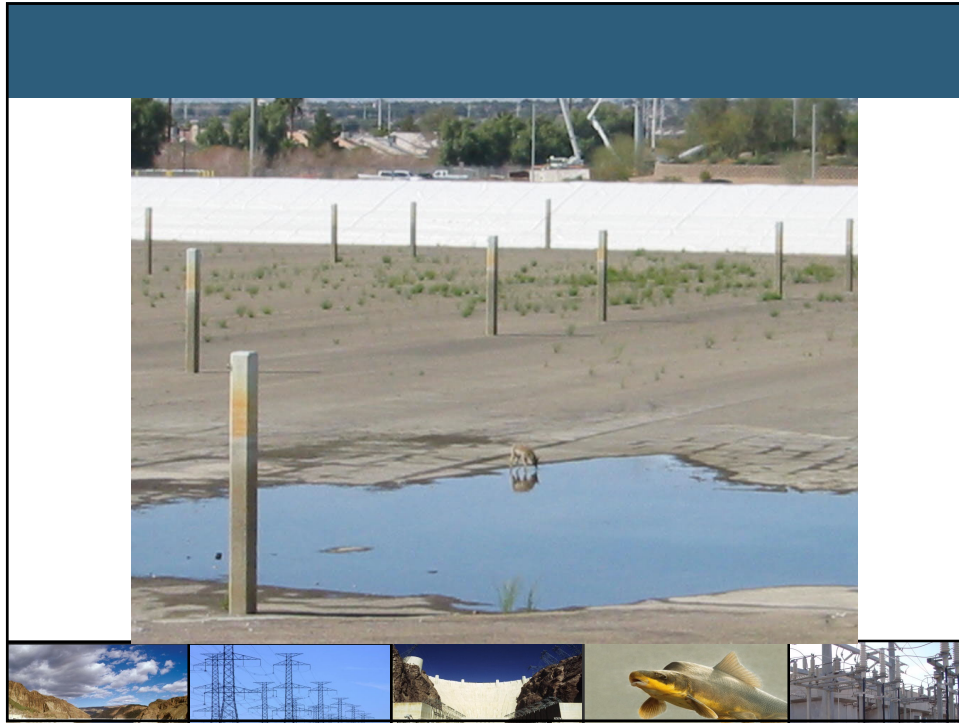
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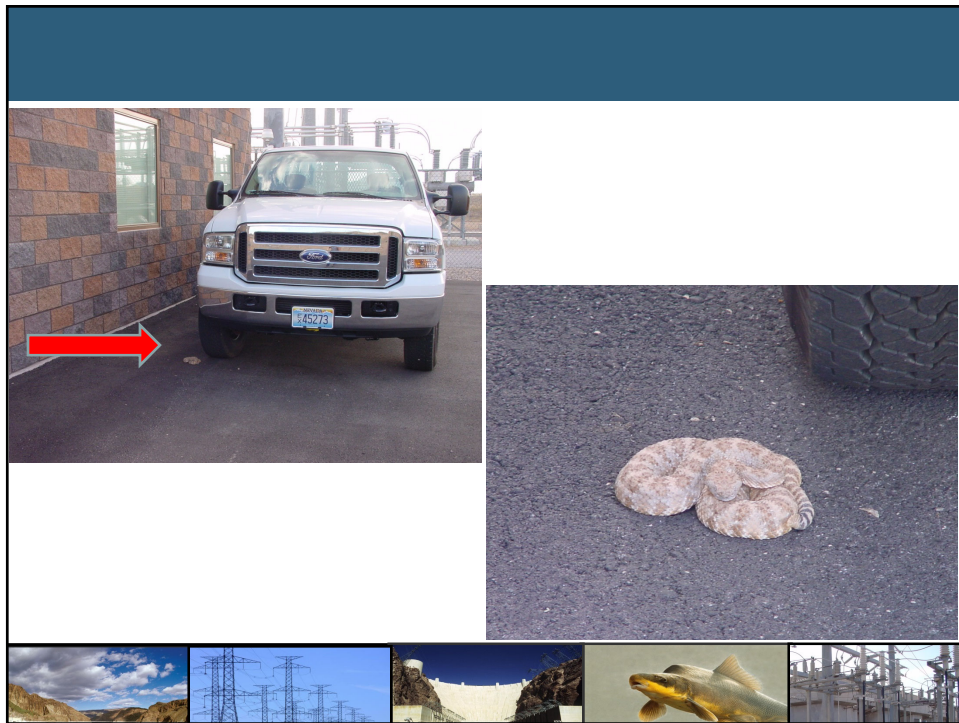
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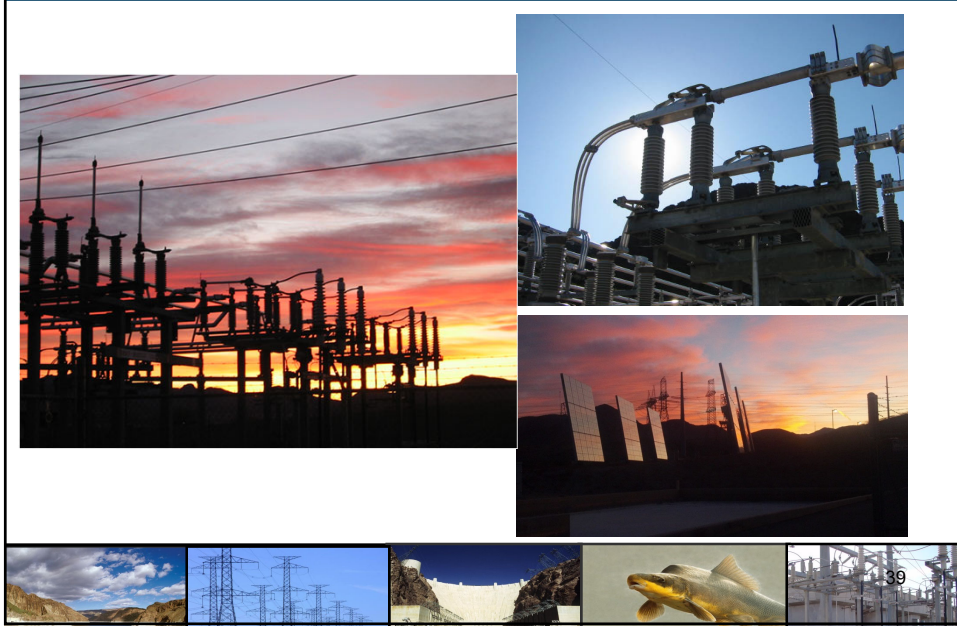


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## Scenic Side of CRCNV



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## Questions?



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