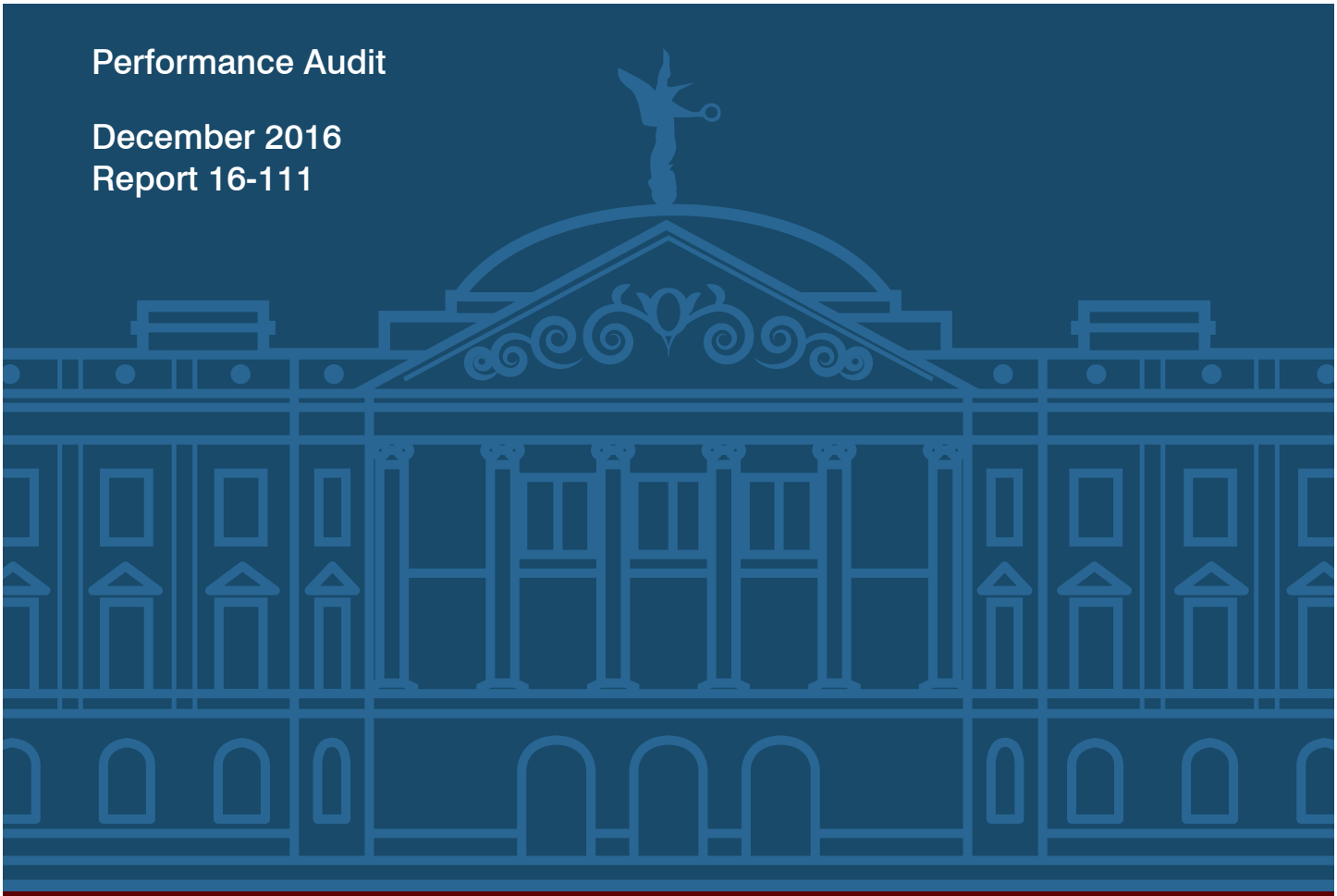
Arizona Power Authority

Authority's process for allocating Hoover Dam power allowed for public input and was consistent with legal requirements, but it should formally approve power pooling arrangements and improve some administrative practices

Performance Audit

December 2016
Report 16-111



A Report to the Arizona Legislature

Debra K. Davenport
Auditor General

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December 30, 2016

Members of the Arizona Legislature

The Honorable Doug Ducey, Governor

Mr. John Underhill, Interim Executive Director
Arizona Power Authority

Transmitted herewith is a report of the Auditor General, *A Performance Audit of the Arizona Power Authority*. This report is in response to Laws 2016, Ch. 107, §4, and was conducted under the authority vested in the Auditor General by Arizona Revised Statutes §41-1279.03. I am also transmitting within this report a copy of the Report Highlights for this audit to provide a quick summary for your convenience.

As outlined in its response, the Arizona Power Authority agrees with some of the findings and plans to implement all of the recommendations.

My staff and I will be pleased to discuss or clarify items in the report.

Sincerely,

Debbie Davenport
Auditor General

cc: Arizona Power Authority Commission members

Attachment

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REPORT HIGHLIGHTS
Performance Audit
December 2016

Arizona Power Authority

CONCLUSION: The Office of the Auditor General has completed a performance audit of the Arizona Power Authority (Authority) pursuant to Laws 2016, Ch. 107, §4. The Authority was created in 1944 to receive and manage Arizona's share of hydroelectric power generated by the Hoover Dam (Hoover power). Federal law allocates Hoover power to Arizona, Nevada, and specific entities in California. The Authority contracts with a federal agency, the Western Area Power Administration, to receive Arizona's allocation. In turn, the Authority allocates the State's Hoover power to eligible Arizona entities and enters into long-term power sales contracts with those entities for a portion of this power. We found that the Authority's most recent process for allocating Arizona's Hoover power, which occurred from June 2011 through July 2015 and will take effect in October 2017, allowed for public input and was consistent with federal and state legal requirements. Additionally, the Authority works with its customers, who have some flexibility in using their Hoover power, to manage their allocations of this power. Customers may also participate in power pooling, and the Authority should ensure that any such arrangements taking effect in October 2017 are approved in accordance with its rules. Further, the Authority should implement the new policies and procedures it developed during the audit to improve conflict-of-interest disclosures and procurement practices.

Authority's 2015 allocation of Hoover power involved public input and was consistent with legal requirements

Authority undertook multi-year allocation process involving public input—This involved both a preliminary planning process and a formal decision-making process to allocate Hoover power that would be available on October 1, 2017. During the preliminary process, the Authority took steps to solicit public input, develop an estimate of the demand for Hoover power, make allocation policy decisions, hire consultants to assist the Authority with legal and technical issues, and develop a Hoover power application form. The preliminary process took place from June 2011 to March 2015. In April 2015, the Authority formally announced the availability of Hoover power, which triggered a decision-making process, or "formal process," specified in rule for holding public conferences, accepting and reviewing applications, verifying application data, announcing a preliminary allocation, and issuing a final allocation. The Authority continued to solicit and consider public input during this formal process.

Allocation policies consistent with legal requirements and other entities' Hoover power allocations—During the allocation process, the Authority made several policy decisions to ensure that it complied with applicable federal and state laws for allocating Hoover power. The allocation was particularly guided by its statutory mandate to dispose of power, as nearly as practical, in an equable manner to render the greatest public service and at levels calculated to encourage its widest practical use. The Authority's policy decisions included retaining existing customers but making some Hoover power available for new customers, restricting allocations of a portion of Hoover power to districts—which include electrical or power districts, drainage districts, irrigation water delivery districts, and agricultural improvement districts—in accordance with statute, considering other federal sources of power granted to applicants, establishing minimum and maximum allocations, and making proportional allocations based on applicants' peak power demands. The Authority considered public input in making its policy decisions, and some of these decisions were comparable to those of other entities allocating Hoover power. We reviewed the Authority's policies and determined that they were consistent with legal requirements and/or made within the Authority's discretion granted to it by these requirements.

Authority made final allocation decision consistent with its policies—To arrive at a final allocation decision, the Authority developed a set of scenarios that reflected various possibilities for allocating Hoover power in alignment with its policies. The Authority's Commission reviewed and considered these scenarios to determine how best to allocate the Hoover power to encourage its widest practical use. It then adopted what it considered to be the best scenario as the final allocation decision, which allocated power to most applicants.

Authority works with customers to manage their Hoover power

The Authority relies on customer input to schedule the monthly delivery of available Hoover power to its customers. Customers have some flexibility in using Hoover power by participating in activities that maximize their use of this power. These activities include banking power for later use, exchanging power with another authority customer for later use, laying off unneeded power for another authority customer to use, and requesting the Authority to purchase additional power when the actual power generated by the Hoover Dam is not sufficient to meet customers' contractual allocations.

Statute also allows authority customers to combine their power resources through power pooling arrangements to maximize the value of each customer's Hoover power. Although more than one power pool may exist, the Authority has authorized and administers only one power pool for existing customers called the Resource Exchange Program (REP). All existing customers may participate in the REP, and the majority do. The Authority first authorized the REP in 2001, but it allowed the power pool to operate for several years after 2011 without its formal written approval, which is required by rule. In November 2016, the Authority formally approved the power pool to continue operating through September 2017, when the existing contracts for Hoover power end.

Recommendation

The Authority should ensure that any power pooling arrangements established under the new contracts effective October 2017 are approved in accordance with its rules.

Authority should improve some administrative practices

Authority should continue implementing new conflict-of-interest policies and procedures—During the audit, the Authority did not have documented policies and procedures to guide conflict-of-interest disclosures by commissioners or authority staff. Instead, the Authority reported that it relied on the commissioners to self-report and disclose any conflicts of interest. We reviewed the Authority's conflict-of-interest file but did not identify any disclosures that occurred during the most recent allocation process. One commissioner disclosed two financial interests during his 2009 appointment process, but a 2012 court ruling regarding whether one of these interests could impair the commissioner's objectivity related to the allocation process determined that it did not rise to the level of a conflict of interest. In November 2016, the Authority established a new policy that requires commissioners and employees to periodically disclose any potential conflicts. It also requires commissioners to publicly disclose at authority meetings any potential conflicts regarding any decision to be made related to items on meeting agendas, which the Authority began implementing in October 2016.

Authority should develop comprehensive procurement policies and procedures—Although the Authority is exempt from the state procurement code, state law requires the Authority to advertise for goods and services costing more than $2,500, other than personal services, as it deems necessary to ensure opportunity for competition. Auditors reviewed three of seven authority purchases of goods and services between operating years 2013 and 2016, totaling $23,608, and determined that the Authority ensured opportunity for competition as required by statute. However, the Authority had not documented its procurement practices in written policies and procedures. Further, although the Authority is not subject to procurement requirements for personal services, it is contractually required to provide power to its customers at the lowest possible rates, which are based on its expenditures, consistent with sound business principles. Auditors selected the six contractors who were paid more than $100,000 each for personal services between operating years 2013 and 2015 and whose combined payments totaled nearly $2.2 million, and examined the Authority's practices to determine what steps it took to ensure that it purchased these services at the lowest possible cost consistent with sound business principles. In each case, the Authority provided auditors some documentation indicating that it either competitively procured the contractor by issuing a request for proposals or selected the contractor because of previous work performed for, and familiarity with, the Authority. However, the Authority did not retain procurement files or sufficiently document its reasons for procurement decisions made. In November 2016, the Authority adopted a written policy documenting its procurement practices, although it did not address the procurement of personal services.

Recommendations

The Authority should:

- Continue to implement its new conflict-of-interest policies and procedures.
- Document its procurement practices for personal services in written policies and procedures. As part of its policies and procedures, the Authority should retain appropriate documentation to support procurement decisions made.

A copy of the full report is available at: www.azauditor.gov | Contact person: Jeremy Weber (602) 553-0333

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INTRODUCTION

Scope and objectives

The Office of the Auditor General has conducted a performance audit of the Arizona Power Authority (Authority) pursuant to Laws 2016, Ch. 107, §4. This audit was conducted under the authority vested in the Auditor General by Arizona Revised Statutes (A.R.S.) §41-1279.03. This report addresses the Authority's allocation of Arizona's share of hydroelectric power generated by the Hoover Dam (Hoover power; see textbox), specifically for the Hoover power that will be available beginning October 2017 (see Chapter 1); the Authority's ongoing management of Hoover power allocated to its existing customers (see Chapter 2); and improvements needed to some authority administrative practices (see Chapter 3). The report also includes various questions and answers related to the Authority's administration of Hoover power (see Chapter 4).

Hoover Dam

The Hoover Dam is the highest and third-largest concrete dam in the U.S. and holds water from the Colorado River in Lake Mead. Congress authorized its construction in 1928. Construction began in 1931, and the dam was dedicated in 1935. The dam sits on the border between Arizona and Nevada. The U.S. Bureau of Reclamation operates the dam to regulate the river and provide flood control, deliver water for irrigation and other domestic uses, and generate electric power.

Source: Auditor General staff review of the U.S. Bureau of Reclamation's website and the federal Boulder Canyon Project Act of 1928. Photo courtesy of the Western Area Power Administration.

Authority responsibilities

The Authority was created in 1944 to receive and manage Arizona's share of Hoover power. Federal law allocates a portion of Hoover power to Arizona (see next section), and the Authority contracts with the Western Area Power Administration (Western) to receive this allocation. Western is a federal agency that was created in 1977 as the power marketing administration within the U.S. Department of Energy and is responsible for marketing and contracting for Hoover power.[1] The Authority is, in turn, responsible for allocating the State's Hoover power to eligible Arizona entities and entering into long-term power sales contracts with those entities for a portion of this power.[2] Because the Authority enters into long-term contracts for both the purchase and sale of Hoover power (e.g., 30 or 50 years), it has conducted only three allocations in its history. The Authority made its most recent allocation in July 2015 and has entered into power sales contracts for the allocation of this Hoover power with a 50-year term that will begin October 2017. According to authority management, customer contracts were signed on September 16, 2016, followed by the signing of the contracts with Western. See Chapter 1, pages 9 through 20, for

[1] Prior to contracting with Western, the Authority contracted with the U.S. Bureau of Reclamation to receive its allocation of Hoover power.

[2] According to A.R.S. §30-121, the Authority cannot contract with Western to receive Arizona's Hoover power until it has previously or simultaneously contracted with purchasers for the power.

additional information about the 2015 allocation. The Authority is also responsible for scheduling the delivery of Hoover power to its customers on a monthly basis (see page 5 for more information about the Authority's customers). This process includes obtaining its customers' input on their power needs for the month and scheduling the delivery of Hoover power according to those needs. At the end of the month, the Authority receives a report on how much Hoover power was made available to customers (see Chapter 2, pages 21 through 22, for additional information). The Authority then bills customers the following month based on wholesale electric rates that it establishes annually to cover its costs (see page 6 for more information).

Hoover power allocations and associated federal acts

Federal law authorizes the allocation of Hoover power to Arizona, Nevada, and specific municipalities and utilities in California. The federal Boulder Canyon Project Act of 1928 (1928 Act) established the first allocation of Hoover power. Since then, the 1928 Act has been revised twice: the Hoover Power Plant Act of 1984 (1984 Act), and the Hoover Power Allocation Act of 2011 (2011 Act). These federal laws include some requirements for the types of entities that are eligible for Hoover power and, therefore, direct how the Authority may allocate Hoover power to Arizona customers. The Authority's statutes provide additional requirements for how Hoover power should be allocated. Specifically:

- **1928 Act—**This federal law authorized the construction of the Hoover Dam and directed how Arizona, California, and Nevada would share in resulting benefits of the dam's water storage and power generation capabilities. It established Arizona's rights to Colorado River water and the power generated by the Hoover Dam upon ratification of the Colorado River Compact.[3] The 1928 Act specified only that the power should be delivered to "states, municipal corporations, political subdivisions, and private corporations." According to the Authority's 1951 annual report, it allocated the Hoover power it received to electrical, irrigation, or water conservation districts; electric cooperatives; municipalities; and public utilities.[4] The 1928 Act did not allocate specific amounts of power for annual delivery to the Authority, but according to the same 1951 report, the Authority distributed to its customers 211,850 kilowatts (kW) of capacity with an associated 889,570 megawatt hours (MWh) of energy from the Hoover Dam.[5] Contracts between the federal government and the Authority for Arizona's share of Hoover power under this act expired on May 31, 1987.

  The 1928 Act created what is now known as Schedule A power (see the next bullet). Schedule A power is governed by A.R.S. Title 30, which authorizes the Authority to receive and allocate power to customers in Arizona. In general, A.R.S. §30-124 requires that Schedule A Hoover power, "…as nearly as practical, shall be disposed of in an equable manner so as to render the greatest public service and at levels calculated to encourage the widest practical use of electrical energy." The only eligibility requirement in Title 30 is that the customer must be a district, state agency, tribal agency, municipality, or an entity that is capable of distributing power (see the textbox on page 3 for descriptions of various districts eligible to purchase Hoover power). However, if supplies of Schedule A power are limited, A.R.S. §30-125 directs the Authority to give preference first to districts, followed by municipalities and electric cooperatives, and then entities that would use the power for irrigation and drainage. In addition, A.R.S. §30-151 requires customers to first obtain a power purchase certificate (PPC) from the Authority as a prerequisite to be able to purchase Schedule A Hoover power. To obtain these certificates, potential customers must file an application with the Authority under oath that includes descriptive information such as principal place of business, the territory in which the

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[3] The Colorado River Compact is a 1921 interstate compact, approved by Congress, that established an agreement between the federal government and ratifying states regarding Arizona, California, Colorado, Nevada, New Mexico, Utah, and Wyoming's allocations of Colorado River water. Arizona ratified the compact in 1944.

[4] This document was the oldest available document showing how the Authority originally allocated Hoover power.

[5] "Capacity" and "energy" are technical terms, which auditors collectively refer to as "power" in this report. Capacity is measured in kW and represents how much power may be used at any given time. Capacity is especially important to large utilities that serve many customers with fluctuating demand. For example, on a very hot day, air conditioner use increases, which increases the demand for energy. A utility could purchase extra capacity to ensure that it is able to transmit enough energy to meet demand. Energy is measured in kilowatt hours (kWh) or MWh and is the commodity on consumer electric bills. The average Arizona home uses about 1 MWh of electrical power each month. Based on this average, the approximately 840,000 MWh of Hoover power that the Authority was allocated in the 2011 Act (see Table 2 on page 4) is enough energy to serve approximately 70,000 Arizona homes for a year.

Districts

A.R.S. §30-101(4) defines districts as power organizations included in A.R.S. Title 30 or water organizations included in A.R.S. Title 45, or both. However, the Legislature passed Laws 1985, Ch. 190, which transferred the governing acts of all power and water organizations from Titles 30 and 45 to Title 48. As of October 2016, districts are governed by various statutes in A.R.S. Title 48, and their formation must be approved by the county in which the district is located. The types of districts eligible to receive Hoover power include:

- Electrical districts formed for the purpose of providing power primarily for pumping water for irrigation.
- Power districts formed for the purpose of cultivating agricultural lands.
- Drainage districts formed for the purpose of providing drainage of agricultural lands.
- Irrigation water delivery districts formed to deliver irrigation water to lands.
- Irrigation and water conservation districts formed to provide for the irrigation of lands.
- Multi-county water conservation districts formed for various purposes, including to assist in the repayment of Central Arizona Project (CAP) costs for the delivery of water.[1]
- Agricultural improvement districts formed for various purposes to assist with the improvement of agricultural lands, including for irrigation and drainage purposes.

[1] The CAP is a 336-mile canal that carries Colorado River water to Maricopa, Pinal, and Pima Counties.

Source: Auditor General staff analysis of A.R.S. Titles 30, 45, and 48.

energy will be sold or used, and the purposes for which it will be used. The Authority must then hold a hearing to determine whether it will grant a PPC to a potential customer. Once granted, PPCs include the name of the customer and the territory for which the PPC was granted.

- **1984 Act—**This federal law reauthorized and continued the Schedule A power allocations for Arizona, California, and Nevada. In addition, the 1984 Act authorized improvements at the Hoover Dam hydroelectric power plant that would result in increased ability to generate power. The 1984 Act referred to power originally available under the 1928 Act as Schedule A power and the power that resulted from the improvements as Schedule B power.[6] Contracts between Western and the Authority for Hoover power under this Act commenced on June 1, 1987, and will expire on September 30, 2017. The only requirement for Schedule B power under the 1984 Act is that the Authority help repay the costs of the improvements. According to authority management, the Authority incorporated these costs into rates paid by the Authority's customers. See Table 1 for the amounts

Table 1
1984 Act annual power allocations

	Authority		California contractors		Colorado River Commission of Nevada	
Schedule	Capacity (kW)[2]	Energy (MWh)[2]	Capacity (kW)	Energy (MWh)	Capacity (kW)	Energy (MWh)
A[1]	189,000	645,989	1,050,000	2,467,729	189,000	645,989
B	188,000	212,000	127,000	143,214	188,000	412,000
Total	**377,000**	**857,989**	**1,177,000**	**2,531,023**	**377,000**	**1,057,989**

[1] The total Schedule A allocation in the 1984 Act is 1,448,000 kW and 3,759,787 MWh. An additional 20,000 kW and 80,000 MWh are allocated to the United States for Boulder City.

[2] See footnote 5 on page 2 for an explanation of capacity and energy.

Source: Auditor General staff review of the 1984 Act.

[6] The 1984 Act also created Schedule C Hoover power, which is any power generated in excess of the amounts allocated in the law. According to authority management, the Authority has not received Schedule C power since calendar year 2000.

of power allocated to Arizona, California, and Nevada under the 1984 Act.

A.R.S. Title 45, Ch. 10, authorizes the Authority to contract for Schedule B power and allocate it to customers in Arizona. Also known as the State Water and Power Plan (see textbox), A.R.S. Title 45 does not include a preference provision that gives certain types of entities priority when power supplies are limited, but it does indicate that all municipalities, districts, and other public bodies are eligible for Schedule B power, with the exception of groundwater replenishment districts established by Title 48, Ch. 27.

- **2011 Act—**This federal law reauthorized allocations of Schedule A and Schedule B power to Arizona, California, and Nevada. In addition, the Act reduced the amounts of Schedules A and B energy in the 1984 Act by 5 percent to create a pool of power for new customers. The 2011 Act called this power pool Schedule D power. Two-thirds of this power was allocated by the federal law to Western to allocate to tribes and other entities that did not have an allocation of Schedule A or B power (Schedule D-1 power). The remaining one-third of Schedule D power was shared equally by Arizona, California, and Nevada (Schedule D-2 power).[7] Contracts between Western and the Authority for Schedules A, B, and D power will commence on October 1, 2017, and expire on September 30, 2067. The 2011 Act required only that the Authority similarly allocate its share of Schedule D-2 power to entities that did not already have an allocation of Schedule A or B power. See Table 2 for the amounts of capacity and energy allocated to Arizona, California, and Nevada by the 2011 Act.

State Water and Power Plan

A.R.S. §45-1701 et seq is the State Water and Power Plan. This plan declared the need to develop water resources for agricultural, municipal, industrial, and fish and wildlife purposes. It also stated that development of power resources supports the development of water resources. The plan specifically lists the Central Arizona Project (CAP) and the State's right to Schedule B power as components of the plan.[1] As of December 2016, the Central Arizona Water Conservation District (CAWCD), which operates the CAP, was the Authority's largest customer in that it contracted for 86 percent of Schedule B power and about 43 percent of the Authority's total allocation of Schedules A and B power.

[1] The CAP is a 336-mile canal that carries Colorado River water to Maricopa, Pima, and Pinal Counties.

Source: Auditor General staff review of A.R.S. §45-1701 et seq, authority documents, U.S. Bureau of Reclamation website, and CAP website.

Table 2
2011 Act annual power allocations

	Authority		California contractors		Colorado River Commission of Nevada	
Schedule	Capacity (kW)[3]	Energy (MWh)[3]	Capacity (kW)	Energy (MWh)	Capacity (kW)	Energy (MWh)
A[1]	190,869	613,689	1,060,387	2,268,418	190,869	613,689
B	189,860	201,400	128,257	136,053	189,860	391,400
D-2[2]	11,510	25,113	11,510	25,113	11,510	25,113
Total	**392,239**	**840,202**	**1,200,154**	**2,429,584**	**392,239**	**1,030,202**

[1] The total Schedule A allocation in the 2011 Act is 1,462,323 kW and 3,571,796 MWh. An additional 20,198 kW and 76,000 MWh are allocated to the United States for Boulder City.

[2] The 2011 Act allocates a total of 103,700 kW and 226,352 MWh for the Schedule D power pool. Of this power, the 2011 Act allocated 69,170 kW and 151,013 MWh to Western to allocate to new entities. This power is referred to as "Schedule D-1" power. The remaining 34,530 kW and 75,339 MWh in the 2011 Act are equally apportioned among the Authority, California contractors, and the Colorado River Commission of Nevada. This power is referred to as "Schedule D-2" power. The Authority and the Colorado River Commission of Nevada allocated Schedule D-2 power to entities in Arizona and Nevada, respectively. Western allocated the Schedule D-1 power and allocated California's share of D-2 power directly.

[3] See footnote 5 on page 2 for an explanation of capacity and energy.

Source: Auditor General staff review of the 2011 Act.

[7] Western was also responsible for allocating California's share of Schedule D-1 and D-2 power. The Colorado River Commission of Nevada is the state agency responsible for the allocation and administration of Hoover power in Nevada.

Although the Authority does not have statutes that govern Schedule D power, it exercised the broad discretion granted by A.R.S. Titles 30 and 45 to receive and allocate this power. It also used eligibility requirements from both sets of statutes, as well as the general directive of A.R.S. §30-124, to allocate Schedule D-2 power to achieve the widest practical use of the Hoover power.

Hoover power customers

The Authority sells Hoover power to 29 existing customers in Arizona whose contracts will expire September 30, 2017. Specifically:

- Twenty-one are Schedule A customers, and these customers are all districts. The Authority's largest Schedule A customer is the Salt River Project Agricultural Improvement and Power District (SRP), which acts as a utility for the Phoenix Metropolitan Area. Each district, including SRP, has its own customers. The districts serve their customers by purchasing power from multiple sources—including the Authority, other federal sources, and for-profit enterprises—and selling this power, and/or the water pumped with it, to their customers.

- Five are Schedule B customers. These customers are districts and municipalities. The CAWCD is the Authority's largest Schedule B customer and uses its allocation of Schedule B Hoover power to operate pumps that move the water through the CAP canal system. Similar to the Authority's Schedule A customers, some of its Schedule B customers also purchase and sell power from multiple sources to their own customers. In contrast, the CAWCD does not sell Hoover power, but it sells the water that is pumped with its power.

- Three districts receive both Schedule A and Schedule B Hoover power.

As discussed in Chapter 1 (see pages 9 through 20), between 2011 and 2015, the Authority undertook a process to allocate Arizona's share of Schedules A, B, and D-2 power that will be available beginning October 1, 2017. According to the Authority, as of September 2016, it had signed sales contracts with 56 customers for this power, including its 29 existing customers and 27 new customers.[8,9]

In California, Western sells Hoover power to 15 customers. Their contracts also expire on September 30, 2017. These customers are specifically named by Congress in the 1984 and 2011 Acts and include a large water district, an investor-owned utility, and municipalities.

Nevada is similar to Arizona because its share of Hoover power is allocated to a third party (the Colorado River Commission of Nevada) for allocation to customers within Nevada. However, similar to California customers being listed in federal law, Nevada's customers are listed in the Nevada administrative code. These customers include power and water utilities and industrial manufacturers (lime, titanium dioxide, and pharmaceuticals).

Organization and staffing

In accordance with A.R.S. §30-105, the Authority is governed by a five-member commission that is responsible for carrying out the Authority's purposes. Commissioners are appointed by the Governor and confirmed by the Arizona Senate. They serve 6-year terms and may be reappointed. As of October 2016, the Commission had one vacancy. In addition, as of October 2016, the Authority had five full-time employees and an interim executive director who administered the Authority. The employees consisted of an executive secretary, financial administrator, senior accountant, senior rate analyst, and information technology manager. The Authority also had one vacancy for a seventh position, that of a deputy director. Finally, the Authority had various consultants under contract who provided legal counsel, including an assistant attorney general representative and an administrative counsel, and lobbying services.

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[8] The 56 customers have entered into contracts for allocations of Hoover power made by the Authority. The Authority will also contract with an additional 8 Arizona customers that received Schedule D-1 power allocations directly from Western.

[9] Two of the Authority's 29 existing customers are merging and have signed one contract for the combined allocation they will receive beginning in October 2017. Thus, all 29 existing customers will continue to receive an allocation of Hoover power, although only 28 contracts were signed.

Budget

The Authority does not receive any State General Fund appropriations. Rather, its revenues consist of payments from its customers for Hoover power. The Authority's contract with Western requires it to charge customers at the lowest possible rates consistent with sound business principles. Each year, the Authority prepares a budget with all estimated expenses, including administrative- and power-related expenses, and determines the appropriate rates to charge its customers based on an estimate of how much power will be available.[10] Rates are adjusted during the year to account for any variances from the original projection. After the end of the operating year and within the succeeding operating year, the Authority refunds to its customers any revenues in excess of actual expenses. As shown in Table 3 (see page 7), the Authority budgeted approximately $28.9 million for total expenses during operating year 2016. Revenues were expected to be approximately $29.3 million for that same year.

[10] The Authority's annual rates included any additional costs the Authority incurred during its Hoover power allocation process, such as legal consultants' fees, in the applicable operating years. Between operating years 2010 through 2016, the Authority estimates it incurred approximately $2.3 million in allocation process costs.

Table 3
Schedule of revenues, expenses, and changes in net position
Operating years 2014 through 2016[1]

	2014 (Actual)	2015 (Actual)	2016 (Budgeted)
Operating revenues	**$27,589,456**	**$29,094,525**	**$29,258,943**
Expenses			
Purchased power	17,878,282	18,071,042	17,163,033
Western credits[2]	(6,600,115)	(6,575,745)	(6,575,217)
Amortization of Hoover Uprating Program costs[2]	6,600,115	6,575,745	6,575,217
Transmission and distribution	7,345,228	7,303,644	7,721,449
Administrative and general	1,972,252	2,113,325	2,582,631
Depreciation	19,665	13,864	2,303
Other operating expenses	14,310		
Miscellaneous nonoperating expenses[3]	1,505,066	2,478,065	1,442,598
Total expenses	**28,734,803**	**29,979,940**	**28,912,014**
Change in net position	(1,145,347)	(885,415)	346,929
Net position, beginning of year	4,656,036	3,510,689	1,401,991
Restatement, change in accounting policy[4]		(1,223,283)	
Net position, end of year[5]	**$ 3,510,689**	**$ 1,401,991**	**$ 1,748,920**

1 The Authority's operating year begins on October 1 and ends on September 30. For example, operating year 2016 began on October 1, 2015, and ended on September 30, 2016.

2 Amortization of Hoover Uprating Program costs represent proceeds from the Hoover Uprating Bonds that were advanced by the Authority to the Bureau of Reclamation to uprate, or improve, the Hoover Power Plant. Western credits are reimbursement of these costs by the Western Area Power Administration.

3 Miscellaneous nonoperating expenses include interest expense, deferred interest expense, amortization, interest income, and other. They are presented on the Authority's financial statements as other income or loss.

4 Amount is an adjustment the Authority made to implement a new government accounting standard. The effect of implementing the standard is that, beginning in operating year 2015, the Authority began recognizing its net pension liability.

5 The Authority's net position at the end of operating year 2015 included monies to be refunded to customers for revenues received from customer charges in excess of the Authority's actual expenses. During operating year 2016, the Authority refunded $796,256 in excess payments to customers.

Source: Auditor General staff analysis of the Authority's audited financial statements for operating years 2014 through 2015 and commission-approved budget for operating year 2016.

Authority's 2015 allocation of Hoover power involved public input and was consistent with legal requirements

The Arizona Power Authority's (Authority) process for allocating Arizona's share of hydroelectric power generated by the Hoover Dam (Hoover power) granted by the federal 2011 Hoover Power Allocation Act (2011 Act) allowed for public input and was consistent with federal and state legal requirements. Specifically, the Authority undertook a multi-year effort to allocate Hoover power to entities in Arizona that consisted of a nearly 4-year preliminary planning process and a 4-month formal decision-making process. During the preliminary and formal processes, the Authority developed various allocation policies to ensure the widest practical use of Hoover power. These polices were consistent with federal and state legal requirements and considered public input. Based on these policies, the Authority developed and considered multiple potential allocation scenarios and adopted an allocation scenario that allocated power to most applicants. The Authority also complied with legal requirements and authority policy to address allocation-related matters such as setting contract length, handling appeals, and reallocating relinquished power.

Authority undertook multi-year allocation process involving public input

Arizona Revised Statutes (A.R.S.) §30-124(A) requires the Authority to "take such steps as may be necessary, convenient, or advisable" to allocate Arizona's share of Hoover power. Consistent with this mandate, the Authority undertook a multi-year allocation effort that involved both a preliminary planning process and a formal decision-making process to allocate Hoover power that would be available on October 1, 2017. The Authority's administrative rules require that the Authority complete a set of steps, each with a deadline of 60 or 90 days, after announcing the availability of Hoover power. Thus, the Authority refrained from making that announcement until after it had taken steps to solicit public input, develop an estimate of the demand for Hoover power, make allocation policy decisions, hire consultants to assist the Authority with legal and technical issues, and develop a Hoover power application form. This planning process, or "preliminary process," took place from June 2011 to March 2015. In April 2015, the Authority formally announced the availability of Hoover power under the 2011 Act, which triggered the time frames specified in rule for holding public conferences, accepting and reviewing applications, verifying application data, announcing a preliminary allocation, and issuing a final allocation. The Authority continued to solicit and consider public input during this decision-making process, or "formal process." Other entities allocating Hoover power similarly engaged in public allocation processes.

Authority used preliminary process to gather input and develop allocation policies—From June 2011 through March 2015, the Authority and its consultants took numerous steps to obtain information and public input to make allocation-related policy decisions before announcing the availability of Hoover power under the 2011 Act. These steps yielded no legally binding decisions but allowed the Authority to plan for making the final, legally binding allocation decisions within the time frames required by rule after its announcement. Specifically, the Authority began the preliminary process in June 2011 by issuing a request for information to the public to obtain ideas and direction on how to allocate the Hoover power. As shown in Table 6 in Appendix B, pages b-1 through b-3, from this time through March 2015, the Authority provided numerous opportunities for public input, including:

- **Two requests for information from the public—**The Authority published two requests for information from the public on its website early in the process (June 2011 and May 2012) and requested public input on how Hoover power made available to Arizona through the 2011 Act should be allocated.[11] According to the Authority's administrative record for the allocation process, the Authority received input from some of its existing customers and potential new customers.[12]

- **Requests for public comment related to 11 documents posted on its website—**Additionally, during both the preliminary and formal processes, the Authority posted 11 documents for public comment on its website. These documents included draft requests for proposal, draft resolutions for proposed allocation policies, and draft allocations. For example, the Authority developed draft resolutions for proposed allocation policies during the preliminary process. The Authority's practice involved posting these draft policies for public comment on its website; posting any public comments it received regarding the draft policies on its website prior to holding a public meeting to discuss the draft policies; and holding a public meeting to discuss the written input and additional verbal input prior to voting to approve a policy resolution. The ensuing policy resolutions often incorporated public input and were followed during the formal allocation process (see pages 13 through 14 for an example of this practice regarding an allocation policy known as *Resolution 14-7*).[13]

  Auditors determined that as more time passed during the Authority's preliminary process, the number of interested parties that commented on posted information and attended public meetings (see next item) increased and included existing customers and other parties that expressed interest in receiving an allocation of Hoover power.

- **Twelve regular or special public meetings—**During both the preliminary process and formal process, the Authority conducted 12 regular or special public meetings that included allocation-related activities on their agendas and provided opportunity for public input at each of these meetings. Some meetings were the Authority's regularly scheduled monthly commission meetings, but special meetings were called to discuss and make policy decisions.[14] These public meetings were held at the Authority's office in Phoenix, and participants could also participate via teleconference.

- **Five workshops—**During both the preliminary and formal processes, the Authority held five workshops conducted by authority staff and consultants to solicit input and address questions about some of the documents posted on its website for public input discussed previously. For example, after receiving input from interested parties, the Authority's staff and consultants would develop potential Hoover power allocation scenarios. After placing these scenarios on the Authority's website for public comment, the Authority held workshops to address legal and technical questions interested parties had about the scenarios. These workshops were also held at the Authority's office in Phoenix, and participants had an opportunity to participate via teleconference.

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[11] The Authority's primary method of releasing information and obtaining input was via its website. According to a commissioner, the Authority believed that anyone interested in and capable of contracting for an allocation would be aware that the 2011 Act made power available to Arizona and that the Authority would be allocating it in advance of its effective date in 2017. Thus, the Authority did not make additional efforts beyond its website to disseminate allocation-related information unless required by rule.

[12] The Authority has maintained a record of all allocation-related documents, correspondence, and meeting agendas and minutes in an administrative record.

[13] Generally, resolutions passed during the preliminary process included language that they could be revisited during the formal process, although auditors did not note any instances in which the resolutions were further revised.

[14] The Authority made relevant information available to interested parties and followed requirements pertaining to public meetings. Auditors noted that documents submitted for public comment were posted on the Authority's website along with written public comments regarding those documents. In addition, auditors evaluated the meetings and executive sessions conducted during the latter part of the preliminary process and the entirety of the formal process and determined that these meetings complied with various provisions of the State's open meeting law. Specifically, for the public meetings and executive sessions held from January 1, 2014 to July 17, 2015, auditors reviewed notices, agendas, and meeting minutes. Auditors determined that notices and agendas were published 24 hours in advance of meeting dates and times, and only items on agendas were discussed. In addition, auditors reviewed a sample of recordings of public meetings and executive sessions to determine if their corresponding minutes were an accurate reflection of the decisions made at public meetings, only items on agendas were discussed, and executive sessions were held for purposes permitted by law. See Chapter 4, pages 34 through 35, for additional information on the Authority's compliance with the State's open meeting law.

- **Three conferences—**In October 2013, the Authority conducted three conferences where interested parties could give presentations about their power needs. Representatives from about 40 districts, municipalities, and electrical cooperatives gave presentations.[15]

- **Two voluntary data requests from interested parties—**The Authority made two data requests from interested parties to gather information to assist it with the allocation process. The Authority's first data request was in August 2013 when it asked interested parties for power usage data so that it could determine if Arizona's allocation of Hoover power would be adequate to meet demand.[16] Then, in November 2014, the Authority requested that interested parties complete a draft application form using their power usage data. This was intended to provide important information to the Authority to help it make policy decisions it needed to make prior to the formal process and to test the adequacy of the application form.

The Authority used the input it received through these requests, public meetings, and workshops during the preliminary process to develop policies and procedures that would guide its activities during the formal process. For example, the Authority used the second voluntary data request to test its draft application form and obtain input regarding additional policy decisions it would need to make prior to the formal process. Specifically, the Authority requested that interested parties complete and submit the application to test it and then the Authority refined the application before using it in the formal allocation process. The Authority's consultants compiled the information from the draft applications and released this information for public comment. Through this process, the Authority could test allocation methodologies that could potentially address concerns that if the Authority intended to base allocations on an entity's peak demand for power, it needed a methodology to help ensure the measurements of the applicants' peak demand were comparable and equitable. For example, some interested parties were concerned that if the Authority used the applicants' electric bills to prove their peak demand, the bills would not provide an accurate reflection of usage. This is because customers are billed for how much power is delivered to them, but they may receive (and use) less power due to losses that occur during its transmission.[17] As a result, the Authority directed its consultants to account for transmission losses when calculating peak demand.

Authority followed formal process in administrative rule to determine allocations—Following its preliminary process, in April and May 2015, the Authority announced that a supply of Hoover power would be available on October 1, 2017, pursuant to the 2011 Act, initiating a much-shorter formal process governed by a set of events and time frames in administrative rule with which the Authority complied.[18] This formal process culminated with the Authority making its final allocation in July 2015. Specifically, in compliance with Arizona Administrative Code (AAC) R12-14-201, the Authority:

- Provided notice that a supply of Hoover power was available and that it would accept applications for the power. As required by rule, the Authority published the notice in a newspaper with open state-wide circulation for 2 consecutive weeks. In the notice, the Authority set an application deadline of May 18, 2015. The Authority received 74 applications (for a list of these applicants, see Table 5 in Appendix A, pages a-1 through a-8). Authority staff and consultants then reviewed the applications, verified application information, applied applicable policy decisions, and developed a preliminary allocation proposal (see next bullet).

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[15] A.R.S. §30-101(4) defines districts as power organizations included in A.R.S. Title 30 or water organizations included in A.R.S. Title 45, or both. See the Introduction, page 3, for more information on the types of districts eligible to receive Hoover power.

[16] As discussed in the Introduction (see page 2), the Authority is required to follow a preference statute (A.R.S. §30-125) if the supply of Schedule A power is insufficient to meet demand. This voluntary data request assisted the Authority in determining if it would need to set policy according to the preference statute, which it did (see page 14).

[17] Entities that are closer to the point of energy generation will experience no or small transmission losses, whereas entities farther away will experience more. The Authority's consultants calculated transmission losses between 2.3 and 9.9 percent for some applicants and adjusted the power amounts they were billed for to reflect actual demand.

[18] In April 2015, the interim Acting Executive Director left the Authority. Because of this, the Authority restarted the formal process on May 1, 2015. General Counsel to the Auditor General determined that restarting the formal process was appropriate because a later start date did not create a disadvantage to applicants. Auditors reviewed the process that began on May 1, 2015, for compliance with rule.

- Released the preliminary allocation proposal on its website and held a public information conference on June 15, 2015, to discuss the proposal. The date, time, and location of the public information conference had been announced in the notice that a supply of Hoover power was available (see first bullet). The preliminary allocation proposal consisted of lists of applicants eligible for each type of available Hoover power—Schedules A, B, and D-2 (see textbox)—the calculated peak demand for each applicant, and a proposed allocation for each applicant.

Types of Hoover power allocated by the Authority

The 2011 Act allocates three types of Hoover power to the Authority to allocate to Arizona customers.[1] See pages 4 through 5 for more detailed information, including the amounts allocated in this Act.

- **Schedule A—**Originally allocated by the federal Boulder Canyon Project Act of 1928 (1928 Act). A.R.S. Title 30 requires that this power be allocated to entities such as districts, state agencies, tribes, and municipalities but that first preference be given to districts if the Authority's allocation is insufficient to meet demand.
- **Schedule B—**Originally allocated by the federal Hoover Power Plant Act of 1984 (1984 Act). A.R.S. §45-1701 et seq, otherwise known as the State Water and Power Plan, requires that this power be allocated to entities such as districts, municipalities, and other public bodies. These statutes do not include a preference provision that gives certain types of entities priority when power supplies are limited. The Central Arizona Water Conservation District, as a part of the State Water and Power Plan, received most of the Authority's Schedule B allocation.
- **Schedule D-2—**The 2011 Act reduced the energy allocations in the 1984 Act by 5 percent to create the Schedule D power pool for new entities. Schedule D-1 power is the portion of the pool allocated by the Western Area Power Administration (Western) to new customers on behalf of the U.S. Secretary of Energy.[2] Schedule D-2 power is the portion of that pool allocated to the Authority. There is no state law governing this type of Hoover power, but the Authority's Commission used the broad discretion granted it by statute to allocate to entities that are eligible for but do not have an allocation of Schedules A or B power.

[1] The 2011 Act also allocates Schedule C power, which is any power generated in excess of the amounts allocated in the law. According to authority management, the Authority has not received Schedule C power since calendar year 2000.

[2] Western is a federal agency that was created in 1977 as the power marketing administration within the U.S. Department of Energy and is responsible for marketing and contracting for Hoover power.

Source: Auditor General staff analysis of the 1928, 1984, and 2011 Acts and A.R.S. Titles 30, 45, and 48.

- Conducted a public comment conference within 60 days following the public information conference. The Authority held this public comment conference 16 days after the public information conference, on July 1, 2015. Per rule, the purpose of the public comment conference is to provide interested parties a forum to further comment on the preliminary allocation proposal.

- Notified interested parties of the final allocation within 60 days of the application deadline. On July 17, 2015, 60 days after the application deadline, the Authority's Commission approved a final allocation and notified interested parties by posting its *Final Hoover Power Marketing Plan Post-2017* (Final Marketing Plan) on its website. See pages 17 through 18 for additional information about the Commission's final allocation decision.

Other entities allocating Hoover power also conducted public allocation processes—Other entities allocating Hoover power also conducted public allocation processes. As discussed in the Introduction (see page 4), Western was responsible for allocating most Schedule D power created by the 2011 Act to new customers (this portion of the Schedule D power pool is referred to as "Schedule D-1" power). The Colorado River Commission of Nevada (CRC) was also responsible for allocating a portion of Schedule D power, known as "Schedule D-2" power, to new customers within that state.[19] Both Western and the CRC undertook a public

[19] Nevada statutes and regulations directed the CRC to retain its existing Schedules A and B customers; therefore, the CRC needed to conduct an allocation process only for Schedule D-2 power.

allocation process that involved obtaining input from the public and interested parties. For example, Western and the CRC conducted various public comment meetings to seek input from the public and interested parties when considering policy decisions and proposing plans for allocating Hoover power.

Allocation policies consistent with legal requirements and other entities' Hoover power allocations

During the allocation process, the Authority made several allocation-related policy decisions to ensure that it complied with applicable federal and state laws. As discussed in the Introduction (see pages 2 through 4), Schedules A, B, and D-2 power each have eligibility and allocation requirements. One of the Authority's statutory requirements particularly guided its overall allocation of Hoover power. Specifically, as discussed in the Introduction (see page 2), A.R.S. §30-124 requires that Schedule A power, "…as nearly as practical, shall be disposed of in an equable manner so as to render the greatest public service and at levels calculated to encourage the widest practical use of electrical energy." Although this statute applies specifically to the allocation of Schedule A power, the Authority applied this statutory requirement to its allocations of Schedules B and D-2 power as well. The Authority also considered public input in making its policy decisions, and some of these decisions were comparable to those of Western and the CRC. Auditors reviewed the Authority's policies and determined that they were consistent with legal requirements and/or made within the Authority's discretion granted to it by these requirements. Specifically:

- **Retained existing customers, but made Hoover power available for new customers—**Consistent with federal and State of Nevada precedent, the Authority decided to retain its existing customers but made additional Hoover power available for new customers. As discussed in the Introduction (see pages 4 through 5), the 2011 Act reauthorized the allocations of Schedules A and B power to Arizona, Nevada, and California, although it reduced their allocations by 5 percent to create Schedule D power for new customers. Similarly, Nevada state law required the CRC to similarly retain its existing Schedules A and B customers, although these customers were subject to the 5 percent reduction. The Authority followed this precedent and also retained its existing Schedules A and B customers but reduced their allocations by 5 percent. In addition, the Authority further reduced its existing customers' allocations in Schedule A by an additional 1 percent to create a small pool of Schedule A power for new customers. Similarly, the Authority also considered varying levels of reductions to its largest existing customer in Schedule B to create a pool of Schedule B power for new customers. The Authority believed that allocating these power pools to new customers who qualified for Schedule A or B power would reduce competition for Schedule D-2 power and help ensure the widest practical use of Hoover power, consistent with its statutory mandate.

  Most of the input that the Authority received from interested parties indicated their agreement with this policy decision. However, the Authority received input from some interested parties who expressed concern that continuing to provide existing Schedule A and/or Schedule B customers with a significant portion of their existing Hoover power allocations would mean that some power usage would shift from agricultural to urban uses. For example, some existing Schedule A customers served areas that were agricultural at the time of the 1985 allocation but had since urbanized. This input supported developing an allocation method that would allocate Hoover power only for agricultural use. The input in favor of not basing allocations on agricultural needs came from stakeholders who believed that the Authority should follow the precedent set by Congress in the 2011 Act and the CRC and renew existing customers' allocations, regardless of whether the customers' service territories had urbanized. To develop a policy that addressed the issue, the Authority relied on state statute and rule and determined that:

  - A.R.S. Titles 30 and 45 inherently provided special consideration for agriculture. A.R.S. Title 30 includes a preference provision that gives preference to districts when supplies of Hoover power are insufficient to meet demand. Because all existing Schedule A and most Schedule B customers are districts (see below regarding preference given to districts), and these districts serve customers engaged in agriculture, the policy decision to allocate Schedule A power only to districts already considered agricultural use. The Authority's Commission did not believe that it needed to give additional consideration to agricultural use; and

- AAC R12-14-201(I) requires the Authority to consider the needs of its customers, its customers' customers, and potential new customers when allocating power. Because agriculture is one of many interests, the Authority opted to not give it additional consideration beyond that stated above. A competing interest cited by the Authority was that of existing customers. Continuing to allocate to existing Schedule A and B customers would ensure that their customers' costs for purchasing power would not be upset by a reduction in inexpensive Hoover power that would need to be replaced with more expensive options.

As a result, the Authority's Commission passed *Resolution 14-7* during the preliminary process, which indicated that the Authority would determine eligibility for an allocation in any schedule based on an applicant's political subdivision status (i.e., status as a district) rather than how it uses its power.

- **Restricted Schedule A power to districts—**Through one of its voluntary data requests to parties interested in applying for an allocation (see page 11), the Authority learned that the amount of Schedule A power allocated to Arizona would be insufficient to meet demand. Therefore, in accordance with A.R.S. §30-125, which requires the Authority to give districts first preference to Schedule A power, the Authority decided to allocate Schedule A power only to districts (see the Introduction, page 2, for more information about the preference requirement).

- **Considered other federal sources of power—**For all applicants, including existing customers, the Authority considered applicants' allocations of other sources of federal power such as power generated by the Colorado River Storage Project and the Navajo Generating Station.[20] Specifically, as part of its process to evaluate applications and determine applicants' power needs, the Authority's consultants compared applicants' peak demands to the amounts of federal power they received from other sources and reduced or limited their allocation of Hoover power based on the receipt of other federal power. One existing customer received a reduced allocation because its previous Hoover power allocation would have exceeded its peak demand for power. The Authority added the power that it reduced from this customer's allocation to the 1 percent power pool for new Schedule A customers. The Authority's decision to consider applicants' allocations of other federal power sources was consistent with Western's approach to allocating Hoover power, which considered benefits to applicants through other federal power allocations.

- **Established minimum and maximum allocations—**For potential new customers, the Authority established a minimum and maximum Hoover power allocation amount. Specifically, the Authority set a minimum allocation requirement of 100 kilowatts (kW) and a maximum of 1,000 kW for Hoover power to be allocated to new entities under Schedule D-2. The Authority believed this requirement was necessary to provide meaningful allocations to applicants and encourage the widest practical use of Hoover power, consistent with its statutory mandate. For example, without a maximum allocation requirement, applicants with larger peak demands (i.e. larger needs) would receive most of the limited Schedule D-2 power, and the remaining applicants with smaller peak demands would receive small allocations. This policy decision was consistent with Western's decision to establish minimum and maximum allocation amounts when allocating Schedule D-1 power.

- **Made proportional allocations based on peak load—**The Authority made proportional Hoover power allocations to potential new customers based on their peak demands. Western similarly allocated Hoover power proportionally based on applicants' peak demands. In contrast, the CRC used a more subjective approach to evaluate applicants and make allocations. Specifically, the CRC's allocation considered how an applicant's use of power would provide the greatest benefit to the State of Nevada by supporting some of the state's public policy goals. For example, the CRC considered the extent to which an applicant's use of power would support the following: economic development (including large, industrial, manufacturing or commercial businesses, and economic development zones) through factors such as job creation and exports of Nevada products; education; and state, local, and tribal governmental entities and rural communities.

[20] The Authority's customers purchase power from multiple sources because Hoover power does not meet all their power needs.

Authority made final allocation decision consistent with its policies

To arrive at a final allocation decision, the Authority tasked its legal and technical consultants with developing a set of scenarios that reflected various possibilities for allocating Hoover power in alignment with its policies. The Authority's Commission then selected what it considered to be the best scenario as the final allocation decision. As shown in Table 4 (see page 16), the Authority's consultants developed five allocation scenarios for potential allocations of Schedules A, B, and D-2 power. The Authority's Commission then reviewed and considered these five scenarios to determine how best to allocate the Schedules A, B, and D-2 power and implement the "widest practical use" statutory requirement (see pages 17 through 18 for a discussion of the final allocation decision). Specifically:

- **Schedule A—**Because most public input indicated that the Authority's policy direction for Schedule A was an acceptable interpretation of requirements under A.R.S. Title 30, the allocation of Schedule A power was the same in all five scenarios. Specifically, the 24 existing Schedule A customers would receive about 94 percent of their existing allocations—which reflected the 5 percent reduction to the Authority's Schedule A allocation under the 2011 Act and an additional 1 percent reduction to create a Schedule A power pool for new districts—minus reductions for excess federal power. The resulting Schedule A power pool was large enough to allocate power to nine new districts.

- **Schedule B—**Similar to Schedule A, the Authority reduced Schedule B allocations by 5 percent based on its reduced allocation under the 2011 Act. However, instead of taking an additional 1 percent as in Schedule A, the Authority opted to implement its "widest practical use" statutory requirement by reducing the allocation for its largest Schedule B customer, the Central Arizona Water Conservation District (CAWCD). Each of the five scenarios includes a reduction to the CAWCD's existing allocation. Scenario 1 reduces the CAWCD's allocation the most, which would create a power pool large enough to accommodate a municipality, a tribe, and an electric cooperative with a large peak demand. Scenario 2 makes a smaller reduction to the CAWCD's allocation and provides for a smaller allocation to the electric cooperative than under scenario 1. Scenarios 3, 4, and 5 included a small reduction to the CAWCD's allocation and eliminated the allocation to the electrical cooperative (see Schedule D-2 discussion for scenario 3 below).

- **Schedule D-2—**In compliance with the requirement of the 2011 Act, the Authority's consultants included only entities that did not already have an allocation of Schedules A or B power in Schedule D-2 for each scenario. Beyond meeting that requirement, the scenarios reflect various possibilities given how many applicants could be accommodated under Schedules A or B, which applicants could be excluded, and whether the size of each applicant's proposed allocation is meaningful. Specifically:

    - In all scenarios, Schedule D-2 included all new applicants, except for new districts that could be accommodated in Schedule A and the new entities that could be accommodated in Schedule B. As discussed previously, the scenarios proposed allocating Schedule D-2 power proportionally based on applicants' peak demand within the 100 kW minimum and 1,000 kW maximum limits established by the Authority to help ensure meaningful allocations.

    - Scenario 3 provided for a smaller reduction to the CAWCD's existing allocation in Schedule B. This scenario acknowledged the CAWCD's protections under A.R.S. Title 45. Specifically, the State Water and Power Plan in A.R.S. Title 45 lists the Central Arizona Project, which is operated by the CAWCD, and the State's right to Schedule B power as components of the plan (see Introduction, page 4). As a result, there was not enough power remaining to give a Schedule B allocation to the large electrical cooperative. Instead, in scenario 3, the cooperative's six members would each be given an allocation in Schedule D-2 (see page 17 for more information about both the cooperative and its member cooperatives' submission of applications). Scenario 3 also would not provide allocations to applicants that are customers of the CAWCD (primarily municipalities in Maricopa County). This proposal helped to meet the "widest practical use" requirement because those applicants receive an indirect benefit of Hoover power via the CAWCD's use of that power to pump water that is provided to its customers. Therefore, the power that would have been allocated to those applicants would be allocated to other applicants that do not benefit from the CAWCD's allocation.

Table 4
Comparison of the Authority's five potential allocation scenarios under Schedules A, B, and D-2

<table>
<tr><th>Schedule A</th><th>Schedule B</th><th>Schedule D-2</th></tr>
<tr><td rowspan="4">Scenarios 1 through 5:
Existing Schedule A customers would receive about 94 percent of their existing allocations. The Authority would deduct 5 percent in accordance with its reduced allocation under the 2011 Act and an additional 1 percent to create a Schedule A power pool for new districts. Existing customers' excess federal power, above their peak demands, would be added to the Schedule A power pool for new customers. Power in this pool would be allocated proportionally based on the new customers' peak demands.</td><td>Scenario 1:
Existing Schedule B customers would receive about 95 percent of their existing allocations. The Authority would deduct 5 percent in accordance with its reduced allocation under the 2011 Act. In addition, the Schedule B allocation for the CAWCD would be reduced by about 12 megawatts (MW). The 12 MW reduction would create a Schedule B power pool to be allocated proportional to the peak demands of a municipality, a tribe, and an electrical cooperative.</td><td rowspan="2">Scenarios 1 and 2:
New customers, those qualified entities that do not already receive a Schedule A and/or B power allocation, would be allocated a share of the power pool that is proportional to their peak demands. These entities would include municipalities, tribes, and electrical cooperatives.</td></tr>
<tr><td>Scenario 2:
Similar to scenario 1, but the CAWCD allocation would be reduced by 6 MW, instead of 12 MW. Therefore, a smaller allocation from the Schedule B power pool would be available for the electrical cooperative, but the municipality and tribe would receive the same Schedule B allocations as they would in scenario 1.</td></tr>
<tr><td rowspan="3">Scenarios 3 through 5:
Similar to scenario 1, but the CAWCD allocation would be reduced by about 1.6 MW, instead of 12 MW or 6 MW under scenarios 1 or 2. This would provide a Schedule B power pool only large enough to allocate to the municipality and tribe but not to the electrical cooperative.</td><td>Scenario 3:
Similar to scenarios 1 and 2, but instead of allocating Schedule B power to the electrical cooperative mentioned in those scenarios, its member cooperatives would be considered individually for Schedule D-2 power. To provide an allocation to these cooperatives, municipalities that are CAWCD customers would not be given an allocation because they have benefited from Hoover power allocations through the CAWCD.</td></tr>
<tr><td>Scenario 4:
Similar to scenario 3, but this scenario would allocate to all new customers without exclusion. However, as a result, they would receive lower allocations.</td></tr>
<tr><td>Scenario 5:
Similar to scenario 3, but municipalities that received a Schedule D-1 allocation from Western that are CAWCD customers would be excluded from this allocation scenario to provide the remaining entities with higher allocations.</td></tr>
</table>

Source: Auditor General staff review of authority documents.

- Scenario 4 included all applicants not eligible for Schedule A or B power without any additional restrictions, which would result in small allocations to each applicant.

- Scenario 5 is similar to scenario 3, except that scenario 5 would deny an allocation to any new applicant receiving both the indirect benefit of Hoover power as a CAWCD customer and receiving the direct benefit of an allocation of Schedule D-1 power from Western.[21]

On July 16, 2015, the Authority posted scenarios 1 through 4 on its website for public review. On July 17, 2015, it posted scenario 5 on its website, and the Authority's Commission met in a public meeting to explain the scenarios, accept public input, and discuss which scenario should become the final allocation. The Authority's Commission voted unanimously to approve scenario 5. Later the same day, the Authority posted the Final Marketing Plan on its website. The Final Marketing Plan is a compendium of the policy decisions the Authority made during the preliminary process and includes information on the Authority's legal authority to make the final allocation decision, justifications for denying allocations to individual applicants, the allocations of Schedules A, B, and D-2 power to applicants in accordance with scenario 5, and comments the Authority received on the preliminary allocation proposal.[22]

Most applicants received an allocation in the Final Marketing Plan

The Authority's final allocation, as reflected in its Final Marketing Plan, granted allocations of Hoover power to most applicants. Of the 74 applicants, 62 received an allocation, including the Authority's 29 existing customers and 33 new applicants. Of the 33 new applicants receiving an allocation, 9 received an allocation of Schedule A power, 2 received an allocation of Schedule B power, and 22 received an allocation of Schedule D-2 power. The Authority denied an allocation to 12 applicants, including 11 that were denied an allocation based on the Authority's effort to achieve the widest practical use of the power. Specifically:

- The Authority denied allocations to three applicants that would benefit from allocations made to other applicants. For example, both Northern Arizona University (NAU) and the City of Flagstaff applied for an allocation. However, public input indicated that allocating to both the City of Flagstaff and NAU would be duplicative because NAU would benefit from the City of Flagstaff's allocation. The Authority agreed and opted to allocate only to the City of Flagstaff. It made similar decisions regarding applications from the Cities of Page and Mesa and their utilities. In these two cases, the Authority allocated power to either the municipality's electric utility or its water utility but not to both.
- The Authority denied allocations to seven applicants because they already received an indirect benefit of Hoover power as customers of the CAWCD and a direct benefit of Hoover power through an allocation of Schedule D-1 power from Western. These applicants were the Cities of Chandler, Glendale, Peoria, Phoenix, Scottsdale, and Tempe and the Metropolitan Domestic Water Improvement District.
- Although it was not necessarily a denial, the Authority did not allocate power to another applicant, the Arizona Electrical Power Cooperative (AEPCO). It instead allocated power to that entity's member cooperatives. AEPCO is the large electrical cooperative utility discussed in the scenarios for Schedule B power on page 15 and includes six individual member cooperatives. AEPCO, as well as six of its member cooperatives, each submitted applications to increase the likelihood that the member cooperatives could receive allocations if AEPCO did not, or vice versa. However, these applicants understood that their applications were duplicative and the Authority would only allocate to either AEPCO or the individual member cooperatives, but not both. Ultimately, the Authority opted to allocate Schedule D-2 power to the member cooperatives individually.

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[21] As reported in the Introduction on page 4, the 2011 Act gave Western two-thirds of the Schedule D power pool to allocate to new applicants (referred to as "Schedule D-1" power). Some entities in Arizona applied for an allocation of both Schedule D-1 from Western and an allocation of Schedule D-2 power from the Authority.

[22] As mentioned on pages 11 through 12, rule required that during the formal process the Authority develop a preliminary allocation proposal and hold conferences to discuss it. This proposal consisted of one scenario the Authority's consultants prepared with information from the applications. The Authority documented the extensive feedback it received on the preliminary proposal in the Final Marketing Plan.

The Authority denied an allocation to a twelfth applicant, the Red Rock Irrigation and Drainage District (Red Rock), because it was not a formed district at the time of application and was, therefore, not eligible for Schedules A, B, or D-2 power. Although the applicant's representative claimed Red Rock was a district on its application, the representative did not submit county documents to demonstrate Red Rock's formation as a district. This disqualified Red Rock from receiving an allocation of Schedule A power under the Authority's *Resolution 15-2*, which required that districts be formed at the time of application to be eligible for an allocation of Schedule A power. The Authority passed this resolution prior to the formal allocation process based on stakeholder input. In addition, according to the Authority, Red Rock did not meet eligibility requirements for Schedule B power under state statute because it was neither a public body nor a municipality. Because Red Rock did not meet eligibility requirements for either Schedules A or B power, it was likewise not eligible for an allocation of Schedule D-2 power since the Authority used those same eligibility requirements for Schedule D-2 power (see Introduction, pages 4 through 5). Prior to denying Red Rock an allocation, the Authority's consultant sent a letter of deficiency to Red Rock's representative requesting proof of district formation as well as documentation that would substantiate Red Rock's peak demand.[23] However, Red Rock's representative did not provide the necessary information. Although the Authority denied an allocation to Red Rock, it included a provision in its Final Marketing Plan indicating that, if Red Rock could form as a district within a 3-month grace period, it would consider allocating power relinquished by another district. However, Red Rock was not formed as a district by the end of the grace period, so it did not receive an allocation. See page 19 for information about Red Rock's appeal.

Authority complied with applicable laws, contract requirements, and re-allocation policy for allocation-related issues

The Authority also complied with applicable laws, contract requirements, and authority policy in addressing various additional allocation-related issues. These issues included setting the contract length, handling appeals of allocation decisions, and reallocating power relinquished by applicants who were awarded an allocation in the Final Marketing Plan.

Contracts set for 50 years but may be terminated early—Applicants granted an allocation of Hoover power in the Final Marketing Plan were required to sign 50-year sales contracts to become actual authority customers.[24] The Authority established the 50-year contract length to be consistent with the term of its federal contract and in accordance with public input and statute. The Authority solicited public input regarding the length of the contracts, and many of the comments it received supported a 50-year term. Specifically, the input suggested that the term of the Authority's contracts with its customers should be the same as the term of the Authority's contract with Western, and noted that the Authority's bond rating depends on long-term power sales contracts being in place.[25] In addition, A.R.S. §30-121(C) prohibits the Authority from purchasing power without first having contracts in place with Arizona customers to receive such power. Further, A.R.S. §30-127(E) allows the Authority to execute contracts for such period as the Authority deems necessary. This statute also states that if such contracts are made for a period exceeding 20 years, they shall be made subject to termination upon reasonable notice by the Authority after the initial 20-year period. Although the Authority opted to set a 50-year term in the contracts, it included a provision allowing it to terminate the contracts upon 5 years' written notice any time after the initial 20-year period.

Additionally, the Authority's contract length is comparable to the CRC's. Specifically, the CRC approved 50-year contracts for Schedule A and B power, although according to CRC management, it has approved 15-year contracts for Schedule D-2 power because it placed a high priority on preserving the right of future commissions to allocate the Hoover Schedule D-2 resource in whatever manner they see fit.

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[23] Western also denied Red Rock an allocation of Schedule D-1 power because it failed to provide enough information to establish its peak demand.

[24] All contracts were signed by September 2016.

[25] As of September 30, 2015, the Authority had two series of bonds outstanding, totaling $44.3 million. In 2001, the Authority issued refunding bonds to pay off bonds initially issued to pay for the Authority's share of improvements to the Hoover Power Plant. These bonds will mature October 1, 2017. In 2014, the Authority issued bonds to prepay its proportional share of high interest rate obligations incurred by the U.S. Bureau of Reclamation for additional improvements at the Hoover Dam. The final maturity for these bonds is October 1, 2045.

Some applicants appealed the Authority's allocation decisions—According to the Authority's rules, the final allocation decision is an "appealable agency action," and appellants have 30 days to appeal or request a hearing regarding that decision. The Authority set a deadline of October 15, 2015, to appeal the final allocation decision. In addition, rule indicates that the Authority's Commission acts as an administrative law judge for appeals.[26] However, rule also states that if an appellant wishes to appeal the Commission's decision, the appellant may refer the appeal to superior court for a judicial review within 10 days of notice of the decision. Of the 62 entities that received an allocation, 6 appealed their allocations. Red Rock, which was denied an allocation as discussed on page 18, also appealed. The Authority grouped these appeals into two categories:

- **Municipal appeals—**On October 14, 2015, a consultant filed identical appeals and requested a hearing on behalf of her six clients: the Cities of Buckeye, Globe, Maricopa, Sedona, and Sierra Vista, and the Town of Payson. The appeals alleged that the Authority's Commissioners and staff did not disclose their conflicts of interest and expressed disagreement with the Authority's policy decisions that led to the final allocation (see Chapter 3, pages 27 through 28, for a discussion of conflicts of interest). As a remedy, the consultant requested her clients' allocations be increased. However, the six appeals were not signed by the municipalities or their attorneys as required by AAC R12-14-615(D). According to the Authority's administrative counsel, without signatures from a qualified representative, the Authority did not consider the appeals valid. The consultant withdrew the appeals.

- **Red Rock—**As discussed on page 18, the Authority denied an allocation to Red Rock on the basis that it was not yet formed as a district at the time of its application. Red Rock's attorney filed an appeal on the basis that an applicant during the Hoover power allocation in the 1980s was permitted to apply for and receive an allocation on the condition that it was formed in time to contract for the power.[27] The appeal also called into question the Authority's policy decisions with respect to its allocation methodology. The Authority's Commission, sitting as an administrative law judge, denied the appeal. It concluded that (1) Red Rock was not formed as a district and, therefore, did not have the standing necessary to file or maintain an appeal; (2) Red Rock was not a district under A.R.S. Title 30; and (3) neither Red Rock nor its representative provided information to prove that it qualified as any other type of eligible entity. Red Rock's representative filed a motion for reconsideration, which was denied by the Authority's Commission sitting as Administrative Law Judge because the motion restated arguments already addressed in the original appeal denial. Red Rock did not appeal the Authority's decision to the Superior Court.

Authority developed and executed a policy for re-allocating relinquished power—Five applicants that received allocations in the Final Marketing Plan relinquished their allocations. Representatives for four of these five applicants stated that they relinquished the allocations because they were unable to make arrangements that would make Hoover power more cost-effective than power from other sources. The fifth applicant did not provide a reason for relinquishing its allocation. Additionally, the Authority withdrew an allocation from a sixth applicant because the applicant could not make transmission arrangements to receive Hoover power. The relinquishments and withdrawal resulted in about 2,400 kW of Schedules A, B, and D-2 power that needed to be reallocated.

In July 2016, the Authority adopted *Resolution 16-6*, which established how the Authority would reallocate relinquished or withdrawn power. In September 2016, the Authority approved a reallocation in accordance with the resolution. Specifically, the first 250 kW of the 571 kW of declined Schedule A power went to a new customer, Hohokam Irrigation and Drainage District, and the remaining power was reallocated to Schedule A customers with allocations of fewer than 1,000 kW based on their allocations in the Final Marketing Plan. The resolution included a similar approach for Schedules B and D-2 power by allocating relinquished power on a pro rata basis. See Table 5 in Appendix A, pages a-1 through a-8, for the final allocations for each applicant. As of September

[26] The Authority's rules regarding appealable agency actions and procedures for appeals and hearings became effective in April 2015. Laws 2016, Ch. 107, established that the Office of Administrative Hearings, and not the Authority's Commission, will conduct hearings regarding appealable agency actions. However, the law excepts any appeals for the final allocation decision in 2015. Thus, if there are additional appeals for the final allocation, the Authority's Commission will act as Administrative Law Judge.

[27] The final marketing plan for the 1985 allocation includes an allocation for a utility that was in the process of forming. The 1985 marketing plan states that the utility had already taken the steps necessary to qualify as an entity that provides electrical service by holding an election where voters approved acquisition of electric facilities.

2016, the Authority reported it had entered into contracts with the 56 entities who ultimately received an allocation of Hoover power, including 29 existing customers and 27 new customers.[28]

[28] Two of the Authority's 29 existing customers are merging and have signed one contract for the combined allocation they will receive beginning in October 2017. Thus, all 29 existing customers will continue to receive an allocation of Hoover power, although only 28 contracts were signed.

Authority works with customers to manage their Hoover power

The Arizona Power Authority (Authority) works with its customers to manage their allocations of hydroelectric power generated by the Hoover Dam (Hoover power). Specifically, the Authority relies on customer input to schedule, on an annual and a monthly basis, the delivery of available power to its customers. Customers have some flexibility in using Hoover power by participating in activities that maximize their use of this power. One of these activities is a statutorily authorized power pooling arrangement that helps facilitate the scheduling process. The Authority first authorized the power pool in 2001, but it allowed the power pool to operate for several years after 2011 without its formal written approval, which is required by its administrative rules. In November 2016, the Authority formally approved the power pool to continue operating through September 2017, but it should ensure that any power pooling arrangements petitioned under the new contracts beginning October 1, 2017, are approved in writing in accordance with its rules.

Authority uses estimated available power and customer input to develop power schedules

The Authority relies on both the estimated amount of Hoover power that will be available to Arizona during the operating year and customer input to develop annual and monthly schedules for the delivery of power to its customers. The Authority and its customers are contractually obligated to pay for the power generated each month by the Hoover Dam. Therefore, the Authority and its customers work to develop annual and monthly power schedules to plan the use of their Hoover power. The scheduling process involves the following actions:

- **Annual schedule—**Annually, the Western Area Power Administration (Western) provides the Authority with a master schedule indicating the expected amount of Hoover power to be generated each month for the upcoming operating year.[29] The actual amount of power generated by the Hoover Dam varies annually as a result of factors such as low water reservoir levels at Lake Mead, reduced Colorado River flows, loss of power due to transmission, and loss of Hoover Dam generating capacity due to maintenance of equipment. According to the Authority, the actual amount of Hoover power available for authority customers is generally less than the amount of power allocated to them by their contracts. When this occurs, customers receive a proportional share of the power that is ultimately generated annually by the Hoover Dam, which is referred to as a customer's entitlement (see textbox). The Authority uses the master schedule

Allocation—The amount of Hoover power contractually allocated to a customer annually in its power sales contract.

Entitlement—The portion of a customer's allocation that the customer is entitled to receive based on the actual amount of power generated at the Hoover Dam, which is generally less than the customer's contractual allocation. For example, a customer with an annual allocation of 2,168 megawatt hours (MWh) pursuant to its contract was only entitled to 1,637 MWh in operating year 2015 based on actual power generation at the Hoover Dam, or 531 MWh less than its allocation.

Source: Auditor General staff analysis of the 1987 and 2017 power sales contracts between the Authority and its customers.

[29] Western is a federal agency that was created in 1977 as the power marketing administration within the U.S. Department of Energy and is responsible for marketing and contracting for Hoover power.

to determine its customers' Hoover power entitlements for the year.[30] The Authority then communicates the expected annual entitlement by month to its customers and/or their representatives. Customers evaluate their expected annual entitlement by month and provide the Authority with a preliminary annual schedule that indicates by month how they intend to use their annual entitlements. Customers have some flexibility regarding the scheduling of their entitled Hoover power based on the availability of this power and customer needs and can request additional power from non-Hoover sources, if needed (see next section).

- **Monthly schedules—**The Authority receives monthly updated information regarding the amount of Hoover power that is expected to be generated in the upcoming month. The Authority then revises each customer's entitlement for the upcoming month and communicates the revised entitlements to the customers and/or their representatives, who provide the Authority with revised scheduling requests for the upcoming month. The Authority reviews and then compiles the information into a final monthly power schedule that is submitted to Western and the Salt River Project (SRP), the entity that schedules Hoover power on behalf of the Authority. The Authority also conducts a monthly scheduling meeting with customers and/or their representatives to discuss previous and future months' scheduling.

- **Delivery and billing—**As Hoover power is generated each month, the SRP schedules the power to be delivered to various points across the State through host utilities, including itself and the Arizona Public Service Company, the Tucson Electric Power Company, the Arizona Electric Power Cooperative, and Western. Customers are responsible for entering into agreements with a host utility to deliver Hoover power from the point of delivery to the customer's location. The Authority bills customers in the month following the month of service for the amount of Hoover power scheduled. The Authority receives reports indicating the amount of Hoover power transmitted to the various points of delivery across the State.

Customers have some flexibility in scheduling Hoover power and can request some additional power

The Authority's customers have some flexibility in scheduling their Hoover power and can request some additional power from non-Hoover sources from the Authority. The Authority allows customers to maximize the value of their Hoover power by permitting them to bank, exchange, and/or lay off power on a monthly basis if they do not need all or part of their entitlements (see textbox). Auditors determined that 27 of the Authority's 29 existing customers used at least one of these three options during the 3-year period from October 1, 2012 through September 30, 2015.[31] These options allow the Authority's customers to use their Hoover power when it is the most advantageous for them to do so and to forgo paying the costs of unneeded power they would otherwise be obligated to pay for under their contracts. Specifically:

- **Banking power—**Banking power allows a customer to "store" Hoover power with the SRP for delivery in a later month. Under an agreement between the Authority and the SRP, customers may bank a portion of their Hoover power with the SRP.[32] When a customer requests to bank

Banking power—Occurs when the SRP receives a portion of a customer's Hoover power for later delivery. Because electrical power cannot be stored, the SRP uses the Hoover power and then later provides the same amount of power to the authority customer from any of the SRP's power sources.

Exchanging power—Occurs when a customer relinquishes all or part of its monthly Hoover power entitlement to another customer, who is obligated to later deliver the same amount of power to the original customer.

Laying off power—Occurs when a customer relinquishes all or part of its monthly Hoover power entitlement to another customer with no expectation of return.

Source: Auditor General staff analysis of the 1987 and 2017 power sales contracts between the Authority and its customers.

[30] The Authority's operating years coincide with federal operating years, which run from October 1 through September 30.

[31] Two customers, the SRP and the Central Arizona Water Conservation District (CAWCD), have the largest Hoover power allocations. The CAWCD operates the Central Arizona Project, a 336-mile canal that carries Colorado River water to Maricopa, Pima, and Pinal Counties. They use their entire Hoover power entitlements each year and do not participate in banking (see footnote 32), exchanging, and laying off activities.

[32] The SRP and the CAWCD may not bank Hoover power with the SRP per the Authority's agreement with the SRP.

Hoover power, the SRP will make use of the power for its needs. The SRP will then provide the amount of banked power, which may be from any of its power resources, to the customer in a later month when requested. Customers are not required to pay for banked Hoover power until it has been scheduled and made available to the customer and will be charged the Hoover power rate at that time. However, the agreement between the Authority and the SRP limits the quantity of Hoover power that may be banked.[33] Additionally, because no payment is required until the Hoover power is scheduled and made available to the customer, any banked power must be returned to customers prior to the end of each operating year.[34]

Banking may be beneficial to customers who are unable to make use of their Hoover power within a particular month but still need their full Hoover power entitlement over the course of the operating year. For example, a customer who needs Hoover power for only certain times of the year—such as for pumping water to irrigate seasonal crops—may bank its monthly power entitlement in those months when the power is not needed and then request the banked power to be delivered in a later month when it is needed. Banking may also be beneficial to customers making economic decisions about the cost of power. For example, a customer may use other sources of power when the market costs of power are lower and bank its Hoover power. Then, in periods when the market costs of power are higher, a customer can use its banked Hoover power to minimize its purchase of other costlier power sources.

- **Exchanging power—**Exchanging power allows an authority customer to temporarily give up unneeded Hoover power to another authority customer. The receiving customer is obligated to return the same amount of power to the relinquishing customer in a later month. Exchanging power is beneficial to customers that may have lower demands for electrical power in months when other customers have higher demands for electrical power. Further, power exchanges may save receiving customers money as the rate of the acquired Hoover power may be less costly than the prevailing market rate of other electrical power sources. Additionally, the exchange allows a relinquishing customer to defer payment on the exchanged power as the Authority will deduct the amount of Hoover power exchanged from the relinquishing customer's bill and add it to the receiving customer's bill in the month of the exchange. A similar process takes place when the power is returned to the relinquishing customer. Therefore, because the Authority bills the customer receiving the power, there is no transfer of monies between customers when power is exchanged. Auditors selected 5 of the Authority's 29 customers and reviewed a total of 30 random transactions during a 3-year period from operating years 2013 through 2015 in which Hoover power was exchanged or laid off (see the next bullet) and determined that the Authority accurately billed each customer.

  According to statute, customers with Schedule A power may only exchange power with other customers with Schedule A power. This is because, according to Arizona Revised Statutes (A.R.S.) §30-151, customers must first obtain a power purchase certificate (PPC) from the Authority to purchase Schedule A power.[35] Therefore, a customer may only exchange Schedule A power with another customer who has obtained a PPC. Additionally, although not required by statute, the Authority has decided to similarly restrict exchanges between customers with Schedule B power to other Schedule B customers. Further, customers are limited in exchanging Hoover power to the extent that there is another customer, within the same power schedule, who is willing to take the unneeded power. As of October 2016, the Authority was considering if Schedule D customers, who will begin receiving Hoover power in October 2017, would be restricted to only exchanging power with other Schedule D customers.

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[33] In accordance with the Authority's agreement with the SRP, customers may not collectively bank more than 95,000 megawatt hours of Hoover power at the end of any calendar month. Once that limit is reached, customers may not bank additional Hoover power until the balance is decreased through customer requests to receive their banked power.

[34] The SRP bank may hold a balance at the end of the operating year due to adjustments in the generation of Hoover power by Western, which may require the SRP to bank Hoover power. In such an event, any Hoover power within the bank at the end of the operating year shall be scheduled for delivery during the following operating year.

[35] A power purchase certificate (PPC) is a certificate that allows a person or operating unit desiring to become a purchaser of electrical energy generated by the waters of the main stream of the Colorado river pursuant to A.R.S. §30-151. PPCs are required for customers to purchase Schedule A power allocations but not Schedules B or D power.

- **Laying off power—**Laying off power allows a customer to give up a portion of its unneeded Hoover power to another customer. Unlike a power exchange, laid-off power is not returned by the receiving customer to the relinquishing customer. Laying off power may be beneficial to customers who are unable to use a portion or all of their annual Hoover power entitlement. For example, customers who use Hoover power to pump groundwater may not require their full annual Hoover power entitlement because the availability of water from other sources may decrease the need for them to use power to pump groundwater. As with exchanges, the receiving customers may benefit by purchasing the laid-off power at the Hoover power rate, which may be less than the prevailing market rate of other electrical power sources they might otherwise need to purchase. Further, laying off power helps customers reduce their monthly bill from the Authority as the laid-off power is paid for by the receiving customer. The Authority will include the laid-off Hoover power in the receiving customer's bill, and will deduct the same amount of Hoover power from the relinquishing customer's bill, in the month in which the power is laid off. As with exchanges, because the Authority bills the customer receiving the power, there is no transfer of monies between customers when power is laid off. As previously stated, auditors selected 5 of the Authority's 29 customers and randomly reviewed a total of 30 transactions during a 3-year period from operating years 2013 through 2015 in which Hoover power was exchanged or laid off and determined that the Authority accurately billed each customer.

  Further, similar to exchanges, a Schedule A or B customer may only lay off power to other customers within the same power schedule. Laying off power is also limited to the extent that there is another applicable customer who is willing to receive the unneeded power. As of October 2016, the Authority was considering if Schedule D customers would be restricted to only laying off power with other Schedule D customers.

  Although laying off power is allowed, it may indicate that the amount of Hoover power made available to a customer exceeds its power needs. The Authority may contractually recapture, or retake, the quantity of Hoover power that is made available to the customer that the Authority determines exceeds the customer's power needs. Specifically, if a customer's Hoover power entitlement exceeds the customer's power needs for 3 consecutive years, the Authority is contractually allowed to recapture the excess amount and allocate it to other customers. However, the Authority will not recapture a customer's Hoover power entitlement if the customer participates in an authorized power pooling arrangement (see next section). According to authority staff, the Authority has not recaptured power from any of its customers to their knowledge.

In contrast to banking, exchanging, or laying off unneeded Hoover power, if a customer's monthly entitlement is not sufficient to meet its needs, the customer may request additional power to make up, or firm up, the difference between the customer's entitlement and its contractual allocation. The additional power that a customer requests to meet its allocation is called firming power, and it is purchased by the Authority on behalf of its customers.[36] According to authority staff, the Authority may purchase firming power from any non-Hoover source, but it relies on customer input to determine the source because of potential transmission limits and because all costs for obtaining this power are passed on to each customer requesting firming power. In fact, if firming power is available at a less expensive rate than Hoover power for a particular month, and if another authority customer is willing to purchase the laid-off Hoover power, customers could decide to lay off the more expensive Hoover power and purchase the less-expensive firming power.

Majority of customers participate in power pooling

The majority of the Authority's customers combine their power resources through a power pooling arrangement. Power pooling occurs when two or more customers combine their power supplies to maximize the value of each customer's Hoover power. A.R.S. §30-129 allows the Authority's customers to participate in power pooling in order to maximize the value of their Hoover power allocations. Power pooling helps facilitate participating

[36] Hoover power consists of capacity and energy. Capacity is measured in kilowatts (kW) and represents how much power may be used at any given time. Energy is measured in kilowatt hours (kWh) or megawatt hours (MWh) and is the commodity on consumer electric bills. With regard to firming power, customers can request additional capacity up to their contractual allocations of capacity. Customers may request additional energy up to, or in excess of, their contractual allocations of energy as long as they have the capacity to receive the additional energy.

customers' decisions regarding banking, exchanging, and laying off unneeded Hoover power and purchasing firming power.[37]

According to the Authority's administrative rules, customers can petition the Authority to enter into a power pooling arrangement with other customers who receive a Hoover power allocation. The petition must include all relevant facts and reasons for the proposed agreement, and the Authority is required to obtain a copy of the agreement between the proposed pool participants. The Authority's administrative rules require that the Authority approve the pool in writing. Although more than one power pool may exist, the Authority has authorized and administers only one power pool for existing customers (i.e., those within allocation of Hoover power through September 2017). This power pool is called the Resource Exchange Program (REP), and it was initially approved in 2001. All of the Authority's existing customers are eligible to participate in the REP, contingent on finding participants who are willing to exchange or to lay off Hoover power, and the majority of the Authority's existing customers participate in it. It is through the REP that the Authority receives these customers' input in the annual and monthly schedule processes discussed earlier (see pages 21 through 22).

In 2004, the Authority, extended, in writing, its approval of the REP through 2011, but the REP operated without the Authority's formal written approval between 2011 and November 2016. Although the Authority implicitly approved the REP's continuation after 2011 by accepting customers' monthly scheduling requests from the REP, the Authority had not technically complied with its rules, which require its approval to be in writing. In November 2016, the Authority formally extended, in writing, the REP's continuation through September 2017, when the existing contracts expire. As of November 2016, the Authority had not yet determined what power pooling arrangements would be established for the new contracts that will begin October 1, 2017, although a representative for some new customers had begun contacting the Authority to discuss potential power pooling arrangements for when the new contracts become effective. Therefore, the Authority should ensure that any new power pooling arrangements are approved in accordance with its rules.

Recommendation

2.1. The Authority should ensure that any power pooling arrangements established under the new contracts beginning October 1, 2017, are approved in accordance with its rules.

[37] Power from other sources may be exchanged and laid off within a power pool; however, the Authority is only statutorily responsible for the exchange and lay off of Hoover power.

Authority should improve some administrative practices

The Arizona Power Authority (Authority) should implement policies and procedures to improve some of its administrative practices. Specifically, the Authority should further develop and/or implement its new policies and procedures related to conflict-of-interest disclosures and procurement practices. In addition, the Authority should seek legislative revision or removal of its statutes regarding conflicts of interest and public meetings that are superseded by other state laws.

Authority should continue implementing new conflict-of-interest policies and procedures

The Authority should continue to implement its new policies and procedures regarding conflict-of-interest disclosures. Arizona Revised Statutes (A.R.S.) §38-501 et seq governs the Authority's commissioners and staff with respect to disclosing conflicts of interest. Specifically, A.R.S. §38-503 requires public officers and employees to disclose any substantial interests and refrain from voting upon or participating in any manner related to such interest.[38] According to A.R.S. §38-501(A), the State's conflict-of-interest statutes apply to all public officers and employees of incorporated cities and towns, political subdivisions, and any of the State's departments, commissions, agencies, bodies, or boards.

During the audit, the Authority did not have documented policies and procedures to guide conflict-of-interest disclosures, either by commissioners or authority staff. Instead, the Authority reported that it relied on the commissioners to self-report and disclose any conflicts of interest, as needed. To determine whether any commissioners had disclosed conflicts of interest, auditors reviewed the Authority's file where it maintains its conflict-of-interest disclosures, as required by A.R.S. §38-509, but did not identify any disclosures by commissioners or staff that occurred during the allocation process. Additionally, commissioners can disclose any potential conflicts of interest through their appointment process, which includes confirmation by the Arizona Senate. For example, one commissioner disclosed two financial interests during his Senate confirmation process in 2009, and these interests were reviewed and considered prior to his appointment. In 2012, a lawsuit regarding one of the commissioner's interests was filed with the Maricopa County Superior Court to determine if the interest could impair the commissioner's objectivity in matters related to the Authority's allocation of hydroelectric power generated by the Hoover Dam (Hoover power).[39] In its decision, the Court ruled that the commissioner's interest was remote rather than substantial and did not rise to the level of a conflict of interest, and, therefore, the commissioner could continue his participation in matters related to the allocation process.[40] No other commissioners involved in the allocation process disclosed conflicts of interest during their most recent appointment processes.

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[38] Pursuant to A.R.S. §§38-502 and 38-503, a "substantial interest" exists when a public official or a public official's relative has a direct or indirect financial interest in his/her decisions made on behalf of the agency regarding contracts, sales, purchases, or services.

[39] See Chapter 1, pages 9 through 20, for more information about the Authority's 2015 allocation of Hoover power.

[40] A.R.S. §38-502 includes a variety of definitions for "remote interest." In accordance with A.R.S. §38-502(10)(g), the Court determined that the commissioner's status as a recipient of a public service generally provided by the Authority (i.e., Hoover power) meant that he was subject to the same terms and conditions as other recipients who are not commissioners, and, therefore, his interest in the allocation was remote.

Based on auditors' recommendations during the audit, the Authority passed *Resolution 16-10* in November 2016, which established a new policy regarding conflict-of-interest disclosures. Specifically, this resolution requires commissioners and employees to certify every 2 years that they have read and understand the State's conflict-of-interest requirements, and to disclose any substantial interests that they or their relatives may have. The resolution also requires third-party contractors who provide goods and services to the Authority to disclose in writing any substantial interests they or a relative may have related to any authority decision.[41] Finally, the resolution requires that commissioners publicly disclose, at the beginning of each authority meeting, any substantial interests in any decision to be made related to items on meeting agendas. The Authority began implementing this latter requirement at its October 2016 commission meeting. The Authority should continue to implement its new conflict-of-interest policies and procedures.

Further, the Authority should pursue legislative changes to revise or remove one of its statutes that is superseded by the State's conflicts-of-interest law in Title 38. Specifically, A.R.S. §30-105(B) states that no member of the Commission shall have any interest in any business that may be adversely affected by the operation of the Authority in the discharge of its duties. This statute predates, and is more restrictive than, the State's conflict-of-interest law in A.R.S. Title 38, which allows commissioners to have remote interests and still participate in decisions related to that interest. However, A.R.S. §38-501(B) indicates that the Title 38 statutes supersede the Authority's statute. Therefore, the Authority should pursue legislative changes to revise or remove A.R.S. §30-105(B) accordingly.

Authority should develop comprehensive procurement policies and procedures

The Authority should develop comprehensive written policies and procedures governing its procurement practices. Although the Authority is exempt from the state procurement code, A.R.S. §30-128(A) imposes certain procurement-related restrictions on the Authority for construction projects costing more than $5,000, and A.R.S. §30-128(B) requires the Authority to advertise for goods and services costing more than $2,500, other than personal services, as it deems necessary to ensure opportunity for competition. The Authority's statutes do not impose competitive procurement requirements for personal services, which would include consulting services such as legal, lobbying, and engineering services. During operating years 2013 through 2016, the Authority did not engage in any construction projects applicable to A.R.S. §30-128(A).[42] However, during this period, the Authority purchased or contracted for goods and services in seven separate instances totaling $65,600 that were subject to A.R.S. §30-128(B) requirements. Auditors reviewed three of these purchases, totaling $23,608, and determined the Authority ensured opportunity for competition as required by statute. For example, auditors examined documentation for the purchase of a firewall and determined the Authority explored three options and analyzed each option prior to making a decision. However, although the Authority complied with its statute in these instances, it had not documented its procurement practices in written policies and procedures.

Further, although the Authority is not subject to procurement requirements for personal services, it is contractually required to provide power to its customers at the lowest possible rates consistent with sound business principles (see the Introduction, page 6, for further details on Authority's rate-setting practices). Because rates charged to customers are based on its expenditures, the Authority should ensure all significant goods and services, including personal services, are purchased at the lowest possible cost consistent with sound business principles. The Authority paid more than $2.5 million in total to 25 contractors during operating years 2013 through 2015 for various personal services. Auditors selected the six contractors who were paid more than $100,000 each, and whose combined payments totaled nearly $2.2 million, and examined the Authority's practices to determine what steps it took to ensure that it purchased these services at the lowest possible cost consistent with sound business

[41] As previously discussed, A.R.S. §38-503 requires public officers and employees to disclose any substantial interests and refrain from voting upon or participating in any manner related to such interest. Pursuant to A.R.S. §38-502, an employee is defined as all persons who are not public officers and who are employed on a full-time, part-time, or contract basis by an incorporated city or town, a political subdivision, or the State or any of its departments, commissions, agencies, bodies, or boards for remuneration.

[42] The Authority's operating year begins on October 1 and ends on September 30. For example, operating year 2016 began on October 1, 2015, and ended on September 30, 2016.

principles. In each case, auditors found some documentation indicating that the Authority either competitively procured the contractor by issuing a request for proposals or selected the contractor because of previous work performed for, and familiarity with, the Authority. However, in each case, the Authority did not retain procurement files or sufficiently document its reasons for procurement decisions made.

Based on auditors' recommendations during the audit, the Authority passed *Resolution 16-11* in November 2016, which documents the Authority's procurement practices regarding construction and goods and services in written policies and procedures. The Authority should also document its procurement practices for personal services in written policies and procedures. These policies and procedures should require authority staff to retain appropriate documentation to support decisions made with regard to procuring personal services.

Authority has procedures for open meeting law compliance but should pursue legislative change

Auditors determined that the Authority has adequate procedures to help ensure that it complies with provisions of the State's open meeting law found in A.R.S. §38-431 et seq. Specifically, in addition to auditors' review of the Authority's compliance with open meeting law during the allocation process (see Chapter 1, footnote 14 on page 10), auditors tested the Authority's compliance with key open meeting law provisions for five authority meetings held between May and August 2016 and determined the Authority met the following requirements:

- Meeting notices and agendas were posted at least 24 hours prior to each meeting and contained required elements, including date, time, place, and matters to be discussed;
- Discussion and action in public session and discussion in executive sessions were limited to topics on the agendas;
- Executive sessions were held for reasons permissible in statute, primarily to receive legal advice from its attorneys; and
- Meeting minutes were accurate representations of each meeting and were made available within 3 business days of each meeting.

Auditors also reviewed the Authority's practices—including its use of templates for meeting-related materials such as notices, agendas, and minutes; posting notices and agendas through the Arizona Department of Administration's website; and the provision of administrative counsel guidance during meetings—and determined that these practices help ensure compliance with open meeting law provisions.

However, the Authority has a statute relevant to meetings that predates and is contradicted by the State's open meeting law. Specifically, A.R.S. §30-107 requires that all authority meetings be public but that it may publish meeting minutes if it considers them to benefit the public interest. In contrast, the State's open meeting law allows all public bodies, including the Authority, to hold some meetings in executive session to discuss confidential matters and requires them to make all public meeting minutes available to the public. Therefore, the Authority should pursue legislative changes to revise or remove A.R.S. §30-107.

Recommendations

3.1. The Authority should continue to implement its new conflict-of-interest policies and procedures.

3.2. The Authority should pursue legislative changes to revise or remove a statutory requirement in A.R.S. §30-105(B) regarding authority commissioners' business interests, which is superseded by the State's conflict-of-interest law in A.R.S. Title 38.

3.3. The Authority should document its procurement practices for personal services in written policies and procedures. As part of its policies and procedures, the Authority should retain appropriate documentation to support procurement decisions made.

3.4. The Authority should pursue legislative changes to revise or remove provisions in A.R.S. §30-107 regarding authority meetings, which are superseded by the State's open meeting law in A.R.S. Title 38.

Questions and answers

This chapter presents information related to the Arizona Power Authority's (Authority) administration of Arizona's share of hydroelectric power generated by the Hoover Dam (Hoover power). This information is presented in a question-and-answer format and either summarizes information from other chapters or presents additional information that may be of specific legislative and public interest.

What are Schedules A, B, and D power?

As discussed in the in the Introduction (see pages 2 through 4), federal law has established three types of Hoover power that is allocated to the Authority and its customers. These three types are referred to as Schedules A, B, and D power. The Authority's statutes provide additional requirements for how these three power schedules should be allocated. Specifically:

- **Schedule A power—**Schedule A power refers to the original Hoover power available under the federal Boulder Canyon Project Act of 1928 (1928 Act). Arizona Revised Statutes (A.R.S.) Title 30 requires that this power be allocated to entities such as districts, state agencies, tribes, and municipalities but that first preference be given to districts if the Authority's allocation is insufficient to meet demand (see the textbox on page 3 for information about districts eligible to purchase Hoover power).

- **Schedule B power—**Schedule B power was created by the federal Hoover Power Plant Act of 1984 (1984 Act), which authorized improvements at the Hoover Dam hydroelectric power plant that would result in increased ability to generate power. Schedule B power refers to the power that resulted from these improvements.[43] A.R.S. §45-1701 et seq, otherwise known as the State Water and Power Plan, requires that this power be allocated to entities such as districts, municipalities, and other public bodies. These statutes do not include a preference provision that gives certain types of entities priority when power supplies are limited.

- **Schedule D power—**Schedule D power was created by the Hoover Power Allocation Act of 2011 (2011 Act), which reduced the amounts of Schedules A and B energy in the 1984 Act by 5 percent to create a pool of power for new customers. This new power pool is referred to as Schedule D power. Two-thirds of this power was allocated by the federal law to the Western Area Power Administration (Western) to allocate to tribes and other entities that did not have an allocation of Schedule A or B power (Schedule D-1 power).[44] The remaining one-third of Schedule D power was shared equally by Arizona, California, and Nevada (Schedule D-2 power). There is no Arizona state law governing this type of Hoover power.

Does federal law or Arizona statute direct the Authority to allocate Hoover power for agricultural uses?

Federal law and Arizona statute do not direct the Authority to allocate power for agricultural uses. During the Authority's most recent allocation of Hoover power (see Chapter 1, pages 9 through 20), the Authority solicited

[43] The 1984 Act also created Schedule C Hoover power, which is any power generated in excess of the amounts allocated in the law. According to authority management, the Authority has not received Schedule C power since calendar year 2000.

[44] Western is a federal agency that was created in 1977 as the power marketing administration within the U.S. Department of Energy and is responsible for marketing and contracting for Hoover power.

public input on how the power should be allocated. Some stakeholders provided input that assumed or stated that law requires the Authority to allocate Hoover power for agricultural uses. However, the three federal acts governing Hoover power and applicable state statutes in A.R.S. Titles 30 and 45 do not direct the Authority to allocate power for agricultural uses. As discussed in the Introduction (see pages 2 through 3), the 1928 Act specified only that Schedule A power should be delivered to "states, municipal corporations, political subdivisions, and private corporations," and the 1984 Act requires only that customers, such as the Authority, pay for the improvements that made Schedule B power available. The 2011 Act required only that the Schedule D power it created be allocated to entities that did not already have an allocation of Schedule A or B power. State statutes further refine eligibility for Schedule A and Schedule B power, but do not cite specific uses as eligibility requirements. Under A.R.S. Titles 30 and 45, political subdivisions such as districts, municipalities, cooperatives, and public bodies (such as tribal agencies) are eligible for Schedule A and/or Schedule B power. Stakeholders who provided input during the allocation process maintained that the Authority's customers had historically used Hoover power for agriculture and that the customers may have been originally formed to serve agricultural needs. However, auditors' review of the three federal acts and relevant state statutes indicates that eligibility is a matter of political subdivision status, not use of the Hoover power.

What is the Resource Exchange Program (REP)?

As discussed in Chapter 2 (see pages 24 through 25), the REP is a power pooling arrangement through which authority customers combine their power supplies to maximize the value of each customer's Hoover power. A.R.S. §30-129 allows the Authority's customers to participate in power pooling, which helps facilitate participating customers' decisions regarding the use of their Hoover power.[45] Although more than one power pool may exist, the REP is the only power pool authorized and administered by the Authority for existing customers (i.e., those with an allocation of Hoover power through September 2017), and it was initially approved in 2001. All of the Authority's existing customers are eligible to participate in the REP, and most customers do. It is through the REP that these customers provide the Authority input for scheduling the monthly delivery of Hoover power. However, the REP operated without the Authority's formal written approval between 2011 and November 2016. Although the Authority implicitly approved the REP's continuation after 2011 by accepting customers' monthly scheduling requests from the REP, the Authority had not technically complied with its rules, which require its approval to be in writing. In November 2016, the Authority formally extended, in writing, the REP's continuation through September 2017, when the existing contracts expire. As of November 2016, the Authority had not yet determined what power pooling arrangements would be established for the new contracts that will begin October 1, 2017. Auditors recommended that the Authority should ensure that any new power pooling arrangements are approved in accordance with its rules.

What is firming power?

As discussed in Chapter 2 (see page 24), firming power is additional power purchased by the Authority from a non-Hoover source on behalf of its customers to make up the deficiency between a customer's entitlement and its contractual allocation. A customer's entitlement is the portion of its allocation that the customer is entitled to receive based on the actual amount of power generated at the Hoover Dam based on factors such as water reservoir levels at Lake Mead and Colorado River flows. According to the Authority, customers' entitlements are generally less than their contractual allocations. Thus, customers may request firming power to meet their contractual allocations.[46] The Authority may purchase firming power from any non-Hoover source but reported that it relies on customer input to determine the source because of potential transmission limits and because all costs for obtaining this power are passed on to each customer requesting it.

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[45] Although a power pool combines power from multiple sources, the Authority is only statutorily responsible for the use of Hoover power.

[46] Hoover power consists of capacity and energy. Capacity is measured in kilowatts (kW) and represents how much power may be used at any given time. Energy is measured in kilowatt hours (kWh) or megawatt hours (MWh) and is the commodity on consumer electric bills. With regard to firming power, customers can request additional capacity up to their contractual allocations of capacity. Customers may request additional energy up to, or in excess of, their contractual allocations of energy as long as they have the capacity to receive the additional energy.

Can the Authority's customers resell Hoover power?

The Authority's customers are contractually allowed to resell their Hoover power to customers within their service area. For example, some of the Authority's customers are electrical districts that resell Hoover power to customers in their districts. However, the Authority's customers are contractually required to resell the power at the lowest possible rates consistent with sound business principles and without a profit. The Authority does not oversee the rates its customers charge to ensure they are as low as possible, but reported that its customers are nonprofit political subdivisions of the State with governing bodies that determine and oversee those rates. Western and the Colorado River Commission of Nevada (CRC)—which administer Hoover power in California and Nevada, respectively—similarly reported that they do not monitor the resale rates charged by their Hoover power customers.[47] Additionally, customers with an allocation of Schedule A power are restricted to reselling Hoover power to the territory indicated within their power purchase certificates (see next question).

What are power purchase certificates?

A.R.S. §30-151 requires customers to first obtain a power purchase certificate (PPC) from the Authority as a prerequisite for purchasing Schedule A Hoover power. To obtain these certificates, potential customers must file an application with the Authority under oath that includes descriptive information such as principal place of business, the territory in which the energy will be sold or used, and the purposes for which it will be used. The Authority must then hold a hearing to determine whether it will grant a PPC to a potential customer. Once granted, PPCs include the name of the customer and the territory for which the PPC was granted. Customers are restricted to using Schedule A power within the territory stated on the PPC. However, the Authority's rules require customers to re-apply for a new PPC if they want to use Schedule A power in a territory that is not stated within the PPC. PPCs are not required to purchase Schedules B or D power.

Why did the Authority set 50-year contract terms for Hoover power allocated in 2015?

The Authority established a 50-year contract term to be consistent with the term of its federal contract in accordance with public input and statute. As discussed in Chapter 1, page 18, the Authority solicited public input regarding the length of the contracts, and many of the comments it received supported a 50-year contract term. Specifically, the input suggested that the term of the Authority's contracts with its customers should be the same as the term of the Authority's contract with Western, and noted that the Authority's bond rating depends on long-term power sales contracts being in place. In addition, A.R.S. §30-121(C) prohibits the Authority from purchasing power without first having contracts in place with Arizona customers to receive such power. Further, A.R.S. §30-127(E) allows the Authority to execute contracts for such period as the Authority deems necessary. This statute also states that if such contracts are made for a period exceeding 20 years, they shall be made subject to termination upon reasonable notice by the Authority after the initial 20-year period. Although the Authority opted to set a 50-year term in the contracts, it included a provision allowing it to terminate the contracts upon 5 years' written notice any time after the initial 20-year period.

Were there inappropriate communications between commissioners and stakeholders during the most recent allocation process?

Auditors did not identify any inappropriate communications between the Authority's commissioners and stakeholders during the Authority's 2015 allocation process. Based on a review of statutes that govern the conduct of public officials in A.R.S. Title 38, there are no statutory provisions that would prohibit communications between individual authority commissioners and parties with an interest in the allocation process. The State's open meeting law prohibits communications between a quorum of authority commissioners and stakeholders. However, based on a review of authority documents, auditors noted that the Authority would issue public

[47] Western directly administers Hoover power for its California customers. The CRC is the state agency responsible for the allocation and administration of Hoover power in Nevada.

meeting notices compliant with open meeting law if there was a possibility that three or more of the five authority commissioners would attend a non-authority meeting during the allocation process.

To mitigate against inappropriate communications between commissioners and stakeholders during the allocation process, the Authority's Commission passed *Resolution 14-5*. This policy allowed authority commissioners to have ex parte communications but disclose them during the preliminary allocation process if, in their judgment, the communication could affect the Commission's decision-making. In addition, it prohibited these communications during the formal process and required that if a stakeholder communicated verbally or in writing with a commissioner, the communication shall be disclosed in the administrative record.[48] Auditors reviewed the administrative record and determined that the Authority's Commission established a process whereby stakeholders could communicate with the Authority rather than individual commissioners. Specifically, the Authority accepted communications through its physical mailing address and an email address established specifically for receiving stakeholder input. Auditors noted one instance where a commissioner received an email from a stakeholder during the formal process. In accordance with *Resolution 14-5*, this email was included in the administrative record, as was a return email that reminded the stakeholder to communicate through the email address set up to receive stakeholder input. See Chapter 1, pages 9 through 12, for additional information about the Authority's preliminary and formal allocation processes.

Did the Authority's commissioners disclose any conflicts of interest during the allocation process?

Auditors did not identify any conflict of interests disclosed by commissioners or staff during the Authority's 2015 allocation of Hoover power. As discussed in Chapter 3 (see pages 27 through 28), during the audit, the Authority did not have documented policies and procedures to guide conflict-of-interest disclosures, and it relied on the commissioners to self-report and disclose any conflicts of interest. To determine whether any commissioners had disclosed conflict of interest, auditors reviewed the Authority's file where it maintains its conflict-of-interest disclosures, as required by A.R.S. §38-509, but did not identify any disclosures by commissioners or staff that occurred during the allocation process. Additionally, commissioners can disclose any potential conflicts of interest through the appointment process, which includes confirmation by the Arizona Senate. For example, one commissioner disclosed two financial interests during his Senate confirmation process in 2009, and these interests were reviewed and considered prior to his appointment. In 2012, a lawsuit regarding one of the commissioner's interests was filed with the Maricopa County Superior Court to determine if the interest could impair the commissioner's objectivity in matters related to the allocation of Hoover power. In accordance with A.R.S. §38-502(10)(g), the Court ruled that the commissioner's interest was remote rather than substantial and did not rise to the level of conflict of interest, and, therefore, the commissioner could continue his participation in matters related to the allocation process. No other commissioners involved in the allocation process disclosed conflicts of interest during their most recent appointment process. Based on auditors' recommendations during the audit, the Authority passed *Resolution 16-10* in November 2016, which established a new policy regarding conflict-of-interest disclosures. Auditors recommended that the Authority continue to implement its new conflict-of-interest policies and procedures.

Has the Authority complied with the State's open meeting law?

Auditors did not identify any violations of the State's open meeting law. As indicated in Chapter 1 (see footnote 14 on page 10), auditors reviewed the notices, agendas, meeting minutes, and some recordings for the meetings and executive sessions the Authority conducted during the latter part of the preliminary allocation process and the entirety of the formal allocation process (January 1, 2014 to July 17, 2015). Auditors determined that the public meetings and executive sessions held during this time were conducted in compliance with various provisions of the State's open meeting law. Specifically, notices and agendas were published 24 hours in advance of meeting

[48] The Authority has maintained a record of all allocation-related documents, correspondence, and meeting agendas and minutes in an administrative record.

dates and times, the minutes were an accurate reflection of the decisions made at public meetings, only items on agendas were discussed, and executive sessions were held for purposes permitted by law.

Similarly, as reported in Chapter 3 (see page 29), auditors reviewed the Authority's compliance with the same open meeting law requirements for public meetings and executive sessions conducted from May through August 2016.[49] Auditors found no violations of the provisions of open meeting law tested and determined that the Authority has controls in place that help to ensure compliance. For example, in addition to posting notices and agendas on its website and at its office, authority staff posted notices and agendas on the Arizona Department of Administration (DOA) website. DOA's public meeting system will not allow a public body to post a meeting notice fewer than 24 hours in advance of a meeting. This helps ensure that the Authority provides at least 24 hours' notice for meetings, which open meeting law requires.

What does the Authority do when it is not allocating power?

As reported in the Introduction (see pages 1 through 2), because the Authority enters into long-term contracts for both the purchase and sale of Hoover power (e.g., 30 or 50 years), it has conducted only three allocations since it was created in 1944. In addition to allocating power, the Authority also performs functions related to the management of the power it allocates. Specifically, the Authority manages power by setting power rates, billing customers, and working with its customers and partners (such as Western and the Salt River Project) to arrange for Hoover power delivery, schedule Hoover power, and purchase firming power(see Chapter 2, pages 21 through 25). In addition, authority management reported that authority representatives attend Hoover Dam Coordinating Committee meetings, as well as meetings of its Engineering and Operating Committee and Hoover Dam Technical subcommittees, where the U.S. Bureau of Reclamation makes its planning and operations decisions regarding the Dam's maintenance. Authority management also reported that authority staff consult with the Arizona Corporation Commission on issues affecting its customers, such as the account crediting arrangements some new customers made with their host utilities. Finally, the Authority began a strategic planning process in September 2016, where, among other issues, the Authority discussed how it might potentially enhance and/or increase its interactions with various regulatory bodies, such as the Arizona Corporation Commission and North American Electric Reliability Corporation, and stakeholder groups, such as the Western Electricity Coordinating Council.

Authority staff perform various administrative functions related to these activities. For example, the Authority employs a rate analyst who assists in setting rates and an accountant who sets budgets and bills for Hoover and firming power. Authority management prepares procurements for goods and services, such as contracting with independent auditors who audit the Authority's financial statements. Authority management also assists the Commission in contracting for and managing administrative counsel and lobbyists. The Authority's information technology manager develops software that supports the Authority's management of Hoover power, and its executive secretary schedules commission meetings and prepares related documents (meeting notices, agendas, and minutes). The Authority's Commission holds public meetings about once a month that include agenda items such as discussions of conditions at the Hoover Dam that may impact power generation, budgeting, and rate-setting. During its strategic planning discussions, the Authority expressed an interest in its staff taking on additional responsibilities, such as conducting monthly customer meetings. Additionally, authority management expects that its staff's workload will increase as the number of its customers will more than double when the new power sales contracts become effective on October 1, 2017.

[49] For the evaluation of meetings and executive sessions during the audit, auditors attended these meetings rather than relying on recordings of meetings conducted during the allocation process. In addition, during the audit, auditors checked the physical and electronic posting locations for notices and agendas rather than consulting the electronic time stamps embedded in the archived website pages on which they were posted.

Are the commissioners' number, terms, and qualifications commensurate with those for other boards and commissions?

The Authority's Commission is similar to other boards and commissions in terms of the number of members and lack of term limits but differs in terms of qualifications. Auditors reviewed the Authority's enabling statutes and compared them with the enabling statutes for seven boards and commissions that have missions related to power, water, or natural resources.[50] Auditors determined that:

- The Authority's Commission is composed of five members, while the seven boards and commissions are composed of between five and seven members;
- Neither the Authority's nor the seven boards and commissions' statutes limit the number of terms a commission or board member may serve. The term length for the Authority's commissioners is 6 years, while the seven boards and commissions' term lengths range from 4 to 6 years;
- Similar to the Authority's Commission, the seven boards and commissions' members are appointed by their respective Governor; and
- Members of the Authority's Commission are qualified "by administrative and business experience." However, the other boards' and commissions' statutes generally require that their members meet mission-specific qualifications. For example, statutes for the Colorado River Commission of Nevada require its members to have knowledge pertaining to the development, resources, and benefits of the Colorado River, and statutes for the Arizona Game and Fish Commission require its members to have knowledge of wildlife conservation. Most of the other comparison boards and commissions also set limits on the number of members who may be from any one political party or geographic location.

[50] These boards and commissions are the Colorado River Commission of Nevada, Arizona Game and Fish Commission, the Arizona Groundwater Users Advisory Councils, Arizona Land Department Board of Appeals, the Arizona Oil and Gas Conservation Commission, the Arizona State Parks Board, and the Arizona Water Banking Authority.

Applicants for Hoover power

In May 2015, the Arizona Power Authority (Authority) announced that a supply of long-term power would be available beginning October 1, 2017, as authorized by the Hoover Power Allocation Act of 2011 (2011 Act). The Authority received 74 applications for an allocation of the 392,239 megawatts of hydroelectric power generated by the Hoover Dam (Hoover power) and allocated to the Authority by this Act. As described in Chapter 1 (see pages 13 through 17), the Authority and its consultants reviewed each application, verified the information in them, and used that information to develop a variety of allocation scenarios that considered the statutory eligibility criteria for each type of power and the Authority's statutory mandate to meet the widest practical use for the power. Table 5, pages a-1 through a-8, lists each applicant, entity type, if the applicant was an existing authority customer under the Hoover Power Plant Act of 1984 (1984 Act), the amount of each type of power the entity was allocated by the Authority or by the Western Area Power Administration (Western) pursuant to the 2011 Act, how much power each entity contracted for, and comments regarding the Authority's decisions to deny allocations and/or an entity's decision to relinquish its allocation.[51]

Table 5
Applicants for Hoover power under the 2011 Act, entity type, status as an existing authority customer, and 2011 Act allocations in kilowatts (kW)
As of October 2016
(Unaudited)

	Applicant	Entity type	Existing authority customer	Final allocation (kW)[1]	Contractual allocation (kW)[2]	Comments
1	Aguila Irrigation District	Irrigation and water conservation district	Yes	A: 2,449 B: 3,878	A: 2,449 B: 3,890	Applicant is one of three authority customers that received both Schedule A and B allocations from the Authority under the 1984 and 2011 Acts.
2	Aha Macav Power Service	Agency of a Federal Indian Tribe	No	D-2: 332	D-2: 356	
3	Ak-Chin Indian Community	Federal Indian Tribe	No	B: 102	B: 1,000	
4	Arizona Electric Power Cooperative, Inc.	Electric cooperative	No			See Chapter 1, page 17, for a discussion of this applicant.
5	Avondale	Municipality	No	D-2: 547	D-2: 586	

[51] Western is a federal agency that was created in 1977 as the power marketing administration within the U.S. Department of Energy and is responsible for marketing and contracting for Hoover power.

Table 5 continued

	Applicant	Entity type	Existing authority customer	Final allocation (kW)[1]	Contractual allocation (kW)[2]	Comments
6	Avra Valley Co-op, Inc.	Not-for-profit water cooperative	No	D-2: 100	D-2: 0	Applicant relinquished its allocation. The account credit offered by the host utility to accept the applicant's Hoover power allocation was insufficient to pay for the cost of the power.
7	Avra Valley Irrigation and Drainage District	Irrigation and water conservation district	Yes	A: 630	A: 677	
8	Buckeye Water Conservation and Drainage District	Irrigation and water conservation district	Yes	A: 2,979	A: 2,979	
9	Buckeye	Municipality	No	D-2: 670	D-2: 718	
10	Central Arizona Water Conservation District (CAWCD)	Multi-county water conservation district	Yes	B: 161,600	B: 162,114	
11	Chandler Heights Citrus Irrigation District	Irrigation and water conservation district	Yes	A: 930	A: 1,000	
12	Chandler Municipal Utilities Department	Municipality	No	D-1: 676 D-2: 0	D-1: 677 D-2: 0	Applicant was denied an allocation by the Authority because it was allocated a Schedule D-1 power allocation by Western and indirectly benefited from Hoover power as a customer of the CAWCD.
13	Cortaro-Marana Irrigation District	Irrigation and water delivery district	Yes	A: 6,439	A: 6,439	
14	Duncan Valley Electric Cooperative, Inc.	Electric cooperative	No	D-2: 700	D-2: 750	
15	Electrical District No. 2 of Pinal County	Electrical district	Yes	A: 19,445	A: 19,445	
16	Electrical District No. 6, Pinal County, Arizona	Electrical district	Yes	A: 8,358	A: 8,358	
17	Electrical District No. Five, Pinal County, Arizona	Electrical district	Yes	See comment	See comment	Merged with Electrical District No. Four, Pinal County, Arizona. Allocation amounts are merged in that entry.

Table 5 continued

	Applicant	Entity type	Existing authority customer	Final allocation (kW)[1]	Contractual allocation (kW)[2]	Comments
18	Electrical District No. Four, Pinal County, Arizona	Electrical district	Yes	A: 34,212	A: 34,212	Merged with Electrical District No. Five, Pinal County, Arizona.
19	Electrical District Number Eight	Electrical district	Yes	A: 13,387 B: 10,917	A: 13,387 B: 10,952	Applicant is one of three authority customers that received both Schedule A and B allocations from the Authority under the 1984 and 2011 Acts.
20	Electrical District Number Seven of the County of Maricopa and the State of Arizona	Electrical district	Yes	A: 10,498	A: 10,498	
21	Electrical District Number Three of the County of Pinal, Arizona	Electrical district	Yes	A: 15,896	A: 15,896	
22	Flagstaff	Municipality	No	D-1: 201 D-2: 172	D-1: 201 D-2: 184	Applicant applied for and was allotted both a Schedule D-1 power allocation by Western and a Schedule D-2 power allocation by the Authority.
23	Franklin Irrigation District	Irrigation and water conservation district	No	A: 303	A: 326	
24	Fredonia	Municipality	No	D-2: 100	D-2: 107	
25	Gila Valley Irriga-tion District	Gila Valley Irrigation District	No	A: 910	B: 978	
26	Gilbert	Municipality	No	D-2: 1,000	D-2: 1,000	
27	Glendale	Municipality	No	D-1: 426 D-2: 0	D-1: 427 D-2: 0	Applicant was denied an allocation by the Authority because it was allocated a Schedule D-1 power allocation by Western and indirectly benefited from Hoover power as a customer of the CAWCD.
28	Globe	Municipality	No	D-1: 115 D-2: 113	D-1: 115 D-2: 121	Applicant applied for and was allotted both a Schedule D-1 power allocation by Western and a Schedule D-2 power allocation by the Authority

Table 5 continued

	Applicant	Entity type	Existing authority customer	Final allocation (kW)[1]	Contractual allocation (kW)[2]	Comments
29	Graham County Electric Cooperative, Inc.	Electric cooperative	No	D-1: 312 D-2: 1,000	D-1: 313 D-2: 1,000	Applicant applied for and was allotted both a Schedule D-1 power allocation by Western and a Schedule D-2 power allocation by the Authority.
30	Grover's Hill Irrigation District	Irrigation and water conservation district	No	A: 100	A: 107	
31	Harquahala Valley Power District	Power district	Yes	A: 2,490	A: 2,490	
32	Hohokam Irrigation and Drainage District	Irrigation and water conservation district	No	A: 100	A: 350	
33	Hualapai Tribal Utility Authority	Agency of a Federal Indian Tribe	No	D-2: 100	D-2: 107	
34	Hyder Valley Irrigation and Water Delivery District	Irrigation water delivery district	No	A: 100	A: 0	Authority withdrew allocation because applicant did not make transmission arrangements.
35	Maricopa County Municipal Water Conservation District Number One	Irrigation and water conservation district	Yes	A: 8,838	A: 8,838	
36	Maricopa	Municipality	No	D-2: 164	D-2: 176	
37	Markham Irrigation and Water Conservation District	Irrigation and water conservation district	No	A: 100	A: 107	
38	McMullen Valley Water Conservation and Drainage District	Irrigation and water conservation district	Yes	A: 3,800 B: 5,342	A: 3,800 B: 5,359	Applicant is one of three authority customers that received both Schedule A and B allocations from the Authority under the 1984 and 2011 Acts.
39	Mesa	Municipality	No	B: 1,497	B: 0	Applicant relinquished its allocation.
40	Mesa Water Resources Department	Municipality	No			Authority did not allocate to this utility because it duplicated the allocation made to the City of Mesa (see this table, line 39). See Chapter 1, page 17, for more information.

Table 5 continued

	Applicant	Entity type	Existing authority customer	Final allocation (kW)[1]	Contractual allocation (kW)[2]	Comments
41	Metropolitan Domestic Water Improvement District	County improvement district	No	D-1: 179 D-2: 0	D-1: 0 D-2: 0	Applicant was denied an allocation by the Authority because it was allocated a Schedule D-1 power allocation by Western and indirectly benefited from Hoover power as a customer of the CAWCD. Applicant relinquished its allocation of Schedule D-1 power.
42	Mohave Electric Cooperative, Inc.	Electric cooperative	No	D-1: 1,145 D-2: 1,000	D-1: 1147 D-2: 1,000	Applicant applied for and was allotted both a Schedule D-1 power allocation by Western and a Schedule D-2 power allocation by the Authority.
43	Mohave Valley Irrigation and Drainage District	Irrigation and water conservation district	No	A: 390	A: 0	Applicant relinquished its allocation. The account credit offered by the host utility to accept the applicant's Hoover power allocation was insufficient to pay for the cost of the power.
44	Navopache Electric Cooperative, Inc.	Electric cooperative	No	D-1: 888 D-2: 1,000	D-1: 890 D-2: 1,000	Applicant applied for and was allotted both a Schedule D-1 power allocation by Western and a Schedule D-2 power allocation by the Authority.
45	Northern Arizona University	State University	No			Authority did not allocate to this applicant because it duplicated an allocation made to the City of Flagstaff (see this table, line 22). See Chapter 1, page 17, for more information.
46	Ocotillo Water Conservation District	Irrigation and water conservation district	Yes	A: 2,115	A: 2,115	
47	Oro Valley	Municipality	No	D-2: 203	D-2: 0	Applicant relinquished its allocation. The account credit offered by the host utility to accept the applicant's Hoover power allocation was insufficient to pay for the cost of the power.
48	Page Utility Enterprises	Municipality	Yes	B: 1,050	B: 1,053	

Table 5 continued

	Applicant	Entity type	Existing authority customer	Final allocation (kW)[1]	Contractual allocation (kW)[2]	Comments
49	Page Water Utility	Municipality	No			Authority did not allocate to this utility because an allocation had already been made to Page Utility Enterprises (see this table, line 48). See Chapter 1, page 17, for more information.
50	Payson	Municipality	No	D-1: 119 D-2: 173	D-1: 119 D-2: 185	Applicant applied for and was allotted both a Schedule D-1 power allocation by Western and a Schedule D-2 power allocation by the Authority.
51	Peoria	Municipality	No	D-1: 691 D-2: 0	D-1: 692 D-2: 0	Applicant was denied an allocation by the Authority because it was allocated a Schedule D-1 power allocation by Western and indirectly benefited from Hoover power as a customer of the CAWCD.
52	Phoenix	Municipality	No	D-1: 3,000 D-2: 0	D-1: 3,007 D-2: 0	Applicant was denied an allocation by the Authority because it was allocated a Schedule D-1 power allocation by Western and indirectly benefited from Hoover power as a customer of the CAWCD.
53	Queen Creek Irrigation District	Irrigation and water conservation district	Yes	A: 1,770	A: 1,770	
54	Red Rock Agriculture Improvement and Power District (also referred to as "Red Rock Irrigation and Drainage District")	Not applicable	No			Applicant claimed to be an irrigation water delivery district formed under A.R.S. Title 48, Ch. 20, but could not provide proof of formation. Therefore, it did not meet this key statutory eligibility requirement. See Chapter 1, pages 18 and 19, for more information.
55	Roosevelt Irrigation District	Irrigation and water conservation district	Yes	A: 3,219	A: 3,219	
56	Roosevelt Water Conservation District	Irrigation and water conservation district	Yes	A: 6,759	A: 6,759	
57	Safford	Municipality	Yes	B: 2,101	B: 2,108	

Table 5 continued

	Applicant	Entity type	Existing authority customer	Final allocation (kW)[1]	Contractual allocation (kW)[2]	Comments
58	Salt River Project Agricultural Improvement and Power District	Agricultural improvement district	Yes	A: 38,782	A: 38,782	
59	San Tan Irrigation District	Irrigation and water conservation district	Yes	A: 520	A: 559	
60	Scottsdale Water Resources Division	Municipality	No	D-1: 2,366 D-2: 0	D-1: 2,371 D-2: 0	Applicant was denied an allocation by the Authority because it was allocated a Schedule D-1 power allocation by Western and indirectly benefited from Hoover power as a customer of the CAWCD.
61	Sedona	Municipality	No	D-2: 111	D-2: 119	
62	Sierra Vista	Municipality	No	D-2: 204	D-2: 218	
63	Silverbell Irrigation and Drainage District	Irrigation and water conservation district	Yes	A: 710	A: 763	
64	Silvercreek Irrigation District	Irrigation and water conservation district	No	A: 100	A: 107	
65	St. David Irrigation District	Irrigation and water conservation district	No	A: 81	A: 0	Applicant relinquished its allocation. The account credit offered by the host utility to accept the applicant's Hoover power allocation was insufficient to pay for the cost of the power.
66	Sulphur Springs Valley Electric Cooperative, Inc.	Electric cooperative	No	D-1: 2,731 D-2: 1,000	D-1: 2,737 D-2: 1,000	Applicant applied for and was allotted both a Schedule D-1 power allocation by Western and a Schedule D-2 power allocation by the Authority.
67	Tempe Public Works Department – Water Utilities Division	Municipality	No	D-1: 241 D-2: 0	D-1: 241 D-2: 0	Applicant was denied an allocation by the Authority because it was allocated a Schedule D-1 power allocation by Western and indirectly benefited from Hoover power as a customer of the CAWCD.
68	Thatcher	Municipality	Yes	B: 1,060	B: 1,064	

Table 5 continued

	Applicant	Entity type	Existing authority customer	Final allocation (kW)[1]	Contractual allocation (kW)[2]	Comments
69	Tonopah Irrigation District	Irrigation and water conservation district	Yes	A: 1,549	A: 1,549	
70	Trico Electric Co-operative, Inc.	Electric cooperative	No	D-1: 3,000 D-2: 1,000	D-1: 3,007 D-2: 1,000	Applicant applied for and was allotted both a Schedule D-1 power allocation by Western and a Schedule D-2 power allocation by the Authority.
71	Wellton-Mohawk Irrigation and Drainage District	Irrigation and water conservation district	Yes	A: 2,910	A: 2,910	
72	Wickenburg	Municipality	Yes	B: 2,313	B: 2,320	
73	Williams	Municipality	No	D-2: 825	D-2: 883	
74	Yuma	Municipality	No	D-2: 996	D-2: 1,000	

[1] This column indicates what allocation type the applicant received from either the Authority (Schedules A, B, or D-2) in the *Final Hoover Power Marketing Plan Post-2017* or, if the applicant applied for Hoover power from the Western Area Power Administration (D-1), in Federal Register Notice of final power allocation dated December 18, 2014.

[2] This column indicates each applicant's contractual allocation amount. These amounts are listed by schedule type and reflect deductions for relinquished power and increases to other applicants of that power.

Sources: Auditor General staff review of applications for Hoover power, the Authority's *Final Hoover Power Marketing Plan Post-2017*, the Federal Register Notice of final power allocation dated December 18, 2014, and the Authority's Final Allocation.

Timeline of allocation events and public comment opportunities

As discussed in Chapter 1 (see pages 9 through 12), the Arizona Power Authority (Authority) undertook a multi-year process that included obtaining public input to allocate Arizona's share of hydroelectric power generated by the Hoover Dam (Hoover power) granted by the federal 2011 Hoover Power Allocation Act (2011 Act). The allocation process commenced in June 2011 when the Authority issued a request for information to the public to solicit input on how the Authority should allocate the power. It concluded in July 2015 when the Authority's Commission approved final allocations for 62 of the 74 applicants (see Chapter 1, pages 17 through 18, for more information about the final allocation and Table 5 in Appendix A, pages a-1 through a-8, for a list of the applicants and the power allocations most received). Table 6 is a summary of the key meetings, workshops, and conferences where parties interested in an allocation of Hoover power could attend to provide input about the Authority's policy decisions and obtain information about how to apply for an allocation.[52] These events are shaded in gray. Table 6 also includes a summary of key documents the Authority released for public comment on its website. These documents are shaded in light blue and include draft policies and proposed allocations.

Table 6

Timeline of events for Authority's allocation of Hoover power per the 2011 Act and public comment opportunities[1]

June 2011 through July 2015

(Unaudited)

Date	Event[1]
June 8, 2011	**Request for information—**Solicited "thoughts, ideas, and direction" on how to allocate power made available to Arizona by the 2011 Act.
February 16, 2012	**Meeting—**Presented information on how much energy and capacity would be available for allocation to Arizona customers.
March 27, 2012	**Meeting—**Discussed ideas for allocating Hoover power and announced a website developed for the purpose of advertising information related to the allocation of Hoover power.
April 26, 2012	**Meeting—**Answered questions about eligibility, requirements, and qualifications for a Hoover power allocation.
May 4, 2012	**Request for information—**Solicited ideas from interested parties regarding how Hoover power should be allocated.
June 19, 2012	**Proposed allocation policy—***Proposal for Establishing Qualitative Principles for the Authority Process for Allocating Hoover Post 2017 Power* is released for public comment on the Authority's website.
September 26, 2012	**Meeting—**Discussed Schedule D power.
October 2012	**Conferences—**Existing customers and interested parties made presentations to the Authority regarding their power needs during three day-long conferences.

[52] In addition to these meetings, the Authority also held regularly scheduled public meetings and some special meetings where it conducted calls to the public. During calendar years 2014 and 2015, the Authority held 37 regular and special public meetings.

Table 6 continued

Date	Event[1]
November 21, 2012 through May 21, 2013	**Request for comment**—Requested and obtained input on a draft request for proposal (RFP) to solicit a consultant to assist with allocating and marketing of Hoover power. The Authority issued the RFP in January 2013 and selected an engineering consultant in May 2013.
June 18, 2013	**Meeting**—The Authority's engineering consultant discussed steps it would be taking with regard to the allocation.
August 20, 2013	**Request for data**—Requested voluntary information from parties interested in an allocation for the Authority to assess potential demand for Hoover power.
March 18, 2014	**Proposed allocation policy**—*Public Information and Comment Draft Plan* (draft allocation plan) is released for public comment on the Authority's website.
April 7, 2014	**Workshop**—Discussed the draft allocation plan.
June 24, 2014	**Proposed allocation policy**—*Issue Papers* is released for public comment on the Authority's website.
June 30, 2014	**Workshop**—Discussed the *Issue Papers* and the next steps in the preliminary process.
September 19, 2014	**Draft application form**—A draft application form is posted for public comment on the Authority's website. The draft application was posted to facilitate comments from interested parties at the September 29, 2014, workshop.
September 29, 2014	**Workshop**—Discussed application issues with potential applicants for Hoover power with the Authority's legal and technical consultants.
October 9, 2014	**Proposed allocation policy**—Draft of *Resolution 14-7* related to allocating Hoover power on the basis of political subdivision status rather than how the power will be used is released for public comment on the Authority's website.
November 3, 2014	**Request for data**—The Authority posted a revised draft application on its website and requested that interested parties voluntarily complete it to assist it in developing an allocation methodology.
November 18, 2014	**Approved allocation policy**—After collecting public input on *Resolution 14-7*, the Authority's Commission approved this allocation policy.
December 29, 2014	**Proposed allocation policy**—Released the *(Revised) Public Information and Comment Draft Plan.*
January 7, 2015	**Proposed allocation time frames**—Obtained input on time frames for completing tasks related to the formal process.
January 16, 2015	**Workshop**—The Authority's consultants held a workshop to discuss the *Public Information and Comment Draft Plan.*
February 16, 2015	**Proposed allocation policy**—Released the *(Final) Public Information and Comment Draft Plan.*
March 3, 2015 and March 17, 2015	**Meetings**—Discussed the remaining policy decisions that were needed for the formal allocation and approved *Resolutions 15-1* through *15-15* which, among other things, required districts to be formed at the time of application, set a 50-year contract term, applied a federal resource test, and defined "new allottee."[2]
April 3, 2015 and May 1, 2015	**Formal allocation process begins**—Issued notice of the availability of power in the *Arizona Republic* and on its website as required by rule. Due to an authority staffing issue, the Authority provided additional notice on its website and in the *Arizona Republic* that it was restarting the formal allocation process and therefore the original application deadline of April 27, 2015, would be moved to May 18, 2015.
April 10, 2015	**Workshop**—Reviewed the application form with interested parties and answered their questions.

Table 6 continued

Date	Event[1]
June 15, 2015	**Proposed allocation policy and public information conference—**Released *Preliminary Proposal* and discussed at a public information conference.
July 1, 2015	**Public comment conference—**Obtained public comment on the *Preliminary Proposal.*
July 16 and 17, 2015	**Meetings—**Held to discuss the release of five potential allocation scenarios for Hoover power for public comment. The first four scenarios were discussed at two meetings on July 16 and 17. At a third meeting on the afternoon of July 17, the Authority's consultants proposed a fifth allocation scenario, and the Authority accepted public comment on it. At the third meeting, the Authority's Commission discussed the five allocation scenarios and voted to approve the fifth scenario.
July 17, 2015	**Allocation report released—**Released the *Final Hoover Power Marketing Plan Post-2017*, which compiled a revised preliminary proposal with the approved allocation scenario and written public comments.

[1] Gray entries are for meetings held at the Authority's office in Phoenix, Arizona. Light blue entries are for documents that were posted on the Authority's website for public comment or action by parties interested in an allocation of Hoover power.

[2] Resolutions passed in March 2015 included language that they could be revisited during the formal process, although auditors did not note any instances in which the resolutions were further revised.

Source: Auditor General staff review of the Authority's administrative record, meeting agendas and minutes, and its website and documents posted on it.

Methodology

Auditors used various methods to address the issues in the report. These methods included reviewing applicable federal laws, including the 1928 Boulder Canyon Project Act, 1984 Hoover Power Plant Act, and 2011 Hoover Power Allocation Act; state laws, including Arizona Revised Statutes (A.R.S.) Titles 30, 45, and 48; and Arizona Power Authority (Authority) rules, policies, procedures, and information from the Authority's website. Auditors also interviewed the Authority's commission members, staff, and various stakeholders, including representatives of the Authority's customers and applicants for Arizona's share of hydroelectric power generated by the Hoover Dam (Hoover power).

Auditors also used the following specific methods to meet the report objectives:

- To review the Authority's 2015 allocation of Hoover power, auditors reviewed the Authority's administrative record for the allocation process, which included allocation-related documents, correspondence, meeting agendas and minutes, applications for Hoover power, and other authority documents such as its *Final Hoover Power Marketing Plan Post-2017*. Auditors also reviewed the Authority's allocation-related policies and compared them to applicable state and federal requirements. In addition, auditors interviewed the Authority's legal and technical consultants who assisted with the allocation. Finally, auditors interviewed officials from the Western Area Power Administration (Western) and the Colorado River Commission of Nevada (CRC), obtained documents and information related to their processes for allocating Hoover power, and compared those processes to the Authority's allocation process.[53]

- To review the Authority's compliance with applicable laws, contract requirements, and authority policy for allocation-related issues (length of contracts, appeals, and allocation of relinquished or withdrawn power), auditors reviewed applicable state law and authority rules and policy. In addition, auditors reviewed the Authority's appeals file and letters from entities that relinquished their allocations. Finally, auditors reviewed meeting minutes on the relinquishing entities' websites, as needed, to obtain additional information regarding the reasons for relinquishing their allocations.

- To review the Authority's management of Hoover power, auditors reviewed and interviewed authority staff about requirements in federal law, state statutes, authority rules, terms of the 1987 and 2017 contracts between the Authority and its customers and the Authority and Western, and the 2011 Scheduling Entity Agreement between the Authority and the Salt River Project. Auditors also reviewed documents and interviewed Western and CRC staff regarding their practices for power scheduling, banking, exchanging, lay-off, power pooling, and oversight of customer rates. In addition, auditors compared the Authority's practices in these areas to applicable federal and state legal requirements and Western's and CRC's practices. Finally, auditors judgmentally selected 5 of the Authority's 29 customers and reviewed a random sample of 30 invoices (6 from each customer) billed during operating years 2013 through 2015 to determine if the Authority appropriately billed customers for the power they delivered.

[53] Western is a federal agency that was created in 1977 as the power marketing administration within the U.S. Department of Energy and is responsible for marketing and contracting for Hoover power. It also directly administers Hoover power for its California customers. The CRC is the state agency responsible for the allocation and administration of Hoover power in Nevada.

- To assess the Authority's practices regarding conflicts of interest, auditors reviewed the Authority's conflict-of-interest disclosures file, and information related to the commissioners' legislative appointment processes. Auditors also reviewed the Authority's conflict-of-interest procedures and compared them to applicable conflict-of-interest requirements in A.R.S. Title 38.

- To assess the Authority's procurement practices, auditors reviewed a random sample of three out of seven authority purchases of goods and services between operating years 2013 and 2016 and associated documentation, and compared them to procurement requirements in A.R.S §30-128; and reviewed the documentation associated with a judgmental selection of 6 out of 25 contractors the Authority paid for personal services between operating years 2013 and 2015.

- To assess the Authority's compliance with the State's open meeting law, auditors reviewed notices, agendas, meeting minutes, and recordings for the public meetings and executive sessions held from January 1, 2014 to July 17, 2015. In addition, auditors attended and reviewed notices, agendas, and minutes for five meetings held between May and August 2016.

- To determine if communications between the Authority's commissioners and parties interested in an allocation of Hoover power were appropriate during the allocation process, auditors reviewed state statutes regarding conduct of public officials, the Authority's administrative record for the allocation process, public meeting notices, and authority policy regarding ex parte communications.

- To determine if the number of members, terms, and qualifications specified in statute for the Authority's Commission are commensurate with those of other boards and commissions, auditors compared the Authority's enabling statutes with those of seven boards and commissions that have missions related to power, water, or natural resources.[54]

- To obtain additional information for the Introduction, auditors reviewed the Authority's audited financial statements for operating years 2014 through 2015 and the authority-prepared budget for operating year 2016. Auditors also reviewed websites maintained by the U.S. Bureau of Reclamation, Western, Central Arizona Project, and the Salt River Project.

- Auditors' work on internal controls included reviewing the Authority's processes for allocating and managing Hoover power, and reviewing the Authority's practices regarding conflicts of interest, procurement, and ensuring compliance with the State's open meeting law. Auditors' conclusions on internal controls are reported in Chapters 1 through 4 of the report.

Auditors conducted this performance audit of the Authority in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

The Auditor General and staff express their appreciation to the Authority's Commission and staff for their cooperation and assistance throughout the audit.

[54] These boards and commissions are the CRC, Arizona Game and Fish Commission, the Arizona Groundwater Users Advisory Councils, Arizona Land Department Board of Appeals, the Arizona Oil and Gas Conservation Commission, the Arizona State Parks Board, and the Arizona Water Banking Authority.

AGENCY RESPONSE

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December 20, 2016

Ms. Debra K. Davenport, Auditor General
Office of the Auditor General
2910 North 44th Street, Suite 410
Phoenix, Arizona 85018

Dear Ms. Davenport:

On behalf of the Arizona Power Authority (APA), the Commissioners, the employees and contractors, we sincerely enjoyed working with your staff over the past seven months. The staff and contractors appreciated the opportunity to explain the uniqueness of our business and its value to the State of Arizona. The review included a trip to Hoover Dam and time discussing APA's strategic direction. I wish to thank the auditors for their professionalism and thorough review of the work conducted by the APA and in learning the unique role the APA plays in delivering Arizona's share of Hoover Dam power. Through your staff's exhaustive efforts, the APA has been able to review current activities and improve planning for the post-2017 allocation and operation of Hoover Dam.

We are pleased that there are very few recommendations and in all cases the APA has or will be taking action. Below you will find our formal response and comments on the audit recommendations:

Chapter 2: Authority works with customers to manage their Hoover power

Recommendation 2.1: The Authority should ensure that any power pooling arrangements established under the new contract beginning October 1, 2017, are approved in accordance with its rules.

Authority Response: The finding of the Auditor General is agreed to and the audit recommendation will be implemented

Response explanation: Note: An updated and revised REP will be implemented effective October 1, 2017

Chapter 3: Authority should improve some administrative practices

Recommendation 3.1: The Authority should continue to implement its new conflict-of-interest policies and procedures.

Authority Response: The finding of the Auditor General is agreed to and the audit recommendation will be implemented

Recommendation 3.2: The Authority should pursue legislative changes to revise or remove statutory requirements in A.R.S. 30-105(B) regarding Authority Commissioners' business interests, which is superseded by the State's conflict-of-interest law in A.R.S Title 38.

Authority Response: The finding of the Auditor General is not agreed to.

Response explanation: THE AUTHORITY BELIEVES THAT ARS § 30-105 ADDRESSES QUALIFICATIONS OF THOSE ELIGIBLE FOR APPOINTMENT TO THE COMMISSION (ADMINISTRATIVE AND BUSINESS EXPERIENCE, CANNOT HOLD SALARIED PUBLIC OFFICE, BE ASSOCIATED WITH CERTAIN PUBLIC SERVICE CORPORATIONS, OR HAVE AN INTEREST IN A BUSINESS THAT MAY BE ADVERSLY AFFECTED BY OPERATION OF THE AUTHORITY) AT THE TIME OF APPOINTMENT. However, the recommendation will be implemented, and the Authority will work with the Arizona Legislature to amend and clarify ARS § 30-105, so as to ensure that THE DISTINCTION BETWEEN ARS § 30-105 ADDRESSING QUALIFICATIONS OF THOSE ELIGIBLE FOR APPOINTMENT TO THE COMMISSION~~,~~ and ARS § 38-503 ADDRESSING CONFLICTS OF INTEREST OF COMMISSIONERS ONCE APPOINTED continue to be viewed as harmonious.

Recommendation 3.3: The Authority should document its procurement practices for personal services in written policies and procedures. As part of its policies and procedures, the Authority should retain appropriate documentation to support procurement decisions made.

Authority Response: The finding of the Auditor General is agreed to and the audit recommendation will be implemented

Response Explanation: Note: The Authority Staff is preparing a draft Resolution #16-14 covering Procurement of Personal Services to be presented to the Authority Commissioners for approval on Tuesday, December 20, 2016.

Recommendation 3.4: The Authority should pursue legislative changes to revise or remove provisions in A.R.S. 30-107 regarding Authority meetings, which are superseded by the State's open meeting law in A.R.S. Title 38.

Authority Response: *The finding of the Auditor General is not agreed to.*

Response explanation: *THE AUTHORITY BELIEVES THAT EXECUTIVE SESSIONS PERMITTED BY ARS § 38-431.03 DO NOT CONSTITUTE PUBLIC MEETINGS SO AS TO BE IN CONFLICT WITH ARS § 30-107 ("ALL MEETINGS OF THE COMMISSION SHALL BE PUBLIC") OR ARS § 38-431.03 ("ALL MEETINGS OF ANY PUBLIC BODY SHALL BE PUBLIC MEETINGS..."). However, the recommendation will be implemented, and the Authority will work with the Arizona Legislature to amend and clarify ARS § 30-107, so as to ensure that statute, and ARS §§ 38-431.01 and 38-431.03, continue to be viewed as harmonious.*

Again, we thank you for the time and effort you and your staff have put into this report and we look forward to its review by the Arizona legislators. Thank you for the opportunity to respond to the recommendations.

Respectfully,

John T. Underhill, Jr.
Interim Executive Director
Arizona Power Authority


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