Karl Cates, IEEFA Research Editor
Pam Eaton, Public-Policy Consultant
May 2019

Institute for Energy Economics and Financial Analysis
IEEFA.org

As Coal Economy Collapses, Imminent Public Budget Crisis Confronts Hopi-Navajo Tribes

Federal Action Required; Past Models Include Responses to Hurricanes Katrina and Sandy, Bailout of Auto Industry, Billions in Local Mitigation for Military Base Closures

Introduction: End of an Era

As the coalfield economy of north-central Arizona moves toward collapse with the impending closure of Navajo Generating Station (NGS) and the Kayenta Mine, the plant's fuel-source, tribal budgets will be gutted practically overnight.

Navajo and Hopi tribal governments in Window Rock and Kykotsmovi, respectively, stand to lose crucial tax-base and royalty payments from Peabody Energy, which owns Kayenta, an open-pit mine on Hopi and Navajo lands. The Navajo government will also lose funding it has long depended on from revenue generated by NGS, which is on Navajo tribal property.

The power plant, commissioned in the 1970s, will close in December in a sign of the times as coal-fired generation continues to decline nationally. This trend is driven by competition from cheaper natural gas and renewables, especially wind and solar. Kayenta Mine's only customer is NGS, so it will cease production this fall, as its stockpiles by then will be sufficient to run the plant through the end of the year.

To compensate for the financial losses, the Navajo government announced this month that it will cut tribal spending by 23 percent in the first full fiscal year following NGS's closure. The Hopi government has not announced what it will do: it depends on coal operations for 85 percent of its public-services budget, which, like that of the Navajo, fund crucial childcare programs, healthcare, education and a host of other public services.

Beyond the looming public fiscal crisis, larger economic waves will be created by the loss of some 700 good-paying jobs in total at NGS and Kayenta and the knock-on effects to the region's small businesses. Equipment suppliers, maintenance companies, builders, restaurants and retail stores of all kinds will feel the blow.

Importantly, the federal government helped create NGS through spending programs and policy moves that underwrote construction of the plant and creation of the mine at a time when coal-fired electricity generation was growing. Now, with the pending shutdown of the plant and the mine, the federal government can and should play a major role in the regional transition away from coal and could even use the Hopi-Navajo situation as a springboard for a national coalfield reinvestment initiative.

The federal government has stepped into such situations before, to responsible bipartisan and powerful regional effect: In its intervention to save the Detroit-based U.S. automobile industry in 2009; in its disaster-relief programs in responses to Hurricane Katrina in New Orleans in 2005 and Hurricane Sandy in the Northeast in 2012; and in its long-running program to ease the effects of military base closings.

Overview: Broad Revenue Losses for Tribes and Local Governments

Navajo Generating Station's three units were phased onto the power grid in 1974, 1975 and 1976. Its main purpose, then and now, is to provide electricity to Phoenix, Tucson and Las Vegas (Los Angeles also owned a stake in the plant until 2016), and to power the diversion of Colorado River water via the 336-mile Central Arizona Project, which supplies water to central and southern Arizona.[1]

The plant, operated by the Phoenix-based Salt River Project, is on Navajo tribal land and is powered by coal from Kayenta Mine, which is operated by Peabody Energy under tribal leases with the Hopi and Navajo governments. The mine and the plant are linked by a 90-mile rail line. Together, they comprise a key piece of the regional economy of northern Arizona and parts of Colorado, New Mexico and Utah.[2]

Owners of the plant—which include the Salt River Project, the Arizona Public Service Company, Nevada Power, Tucson Electric Power, and the the U.S. Bureau of Reclamation—officially announced plans for decommissioning in February; closure will occur on Dec. 22.[3] The mine, whose sole customer is NGS, will cease production in October[4] (NGS will operate in November and into December on stockpiled coal).

Plans to close the mine and the plant have been known for years, but Peabody Energy and factions of the Navajo government sought to delay the shutdowns through the efforts of a tribally owned company called Navajo Transitional Energy

[1] Grand Canyon Trust, "Clean Energy Options for Navajo Generating Station," September 2010.
[2] IEEFA, "Navajo-Hopi Transition Impact Investment Fund: Four Opportunity Areas," March 2019.
[3] SRP, "NGS Owners Move Forward with Decommissioning," February 28, 2019.
[4] E&E News, "Peabody to close mine linked to troubled power plant," February 7, 2019.

Co. (NTEC). That initiative was recently abandoned,[5] however, when tribal leaders voted not to indemnify NTEC ownership against potentially limitless cleanup liabilities.[6]

For decades, Navajo and Hopi governments alike have relied heavily on lease and royalty income from the NGS-Kayenta complex to support various public services. In part because of the debate around whether to buy NGS and keep the plant and mine running, little preparation occurred for the possibility that those revenues would dry up abruptly—as they will now.

While neither tribal government has published precise department-by-department expectations for the fallout from the losses of these revenue streams and little by way of detail has been offered in the press, the broad impact is evident.

Navajo Nation President Jonathan Nez and Vice President Myron Lizer in a Facebook post in mid-May[7] acknowledged the likely effect on the Navajo government's overall budget.

> *"For the upcoming new fiscal year that begins on Oct. 1, the current revenue projection is approximately $158 million, which is a $14 million decrease from the current fiscal year budget of $172 million. For fiscal year 2021, the Nation's revenue projection is expected to drop significantly to $132 million due to the closure of the Navajo Generating Station and Kayenta Mine."*

In other words, the closures of NGS and Kayenta Mine will result in a 23 percent annual budget reduction ($40 million) for Navajo Nation in the fiscal year after closure.

The damage will be much worse, relatively speaking, for the Hopi government, which represents a smaller population but one that is even more dependent on revenue from the NGS-Kayenta complex.

The Hopi annual budget has run from $18 to $21 million annually in recent years.[8] It will take an 85 percent hit through loss of mining royalties, according to the most recent publicly available information, in the Hopi Tutuveni newspaper:[9]

> *"With the closing of Navajo Generating Station (NGS), the biggest funding source for the Hopi tribe, the tribe will be*

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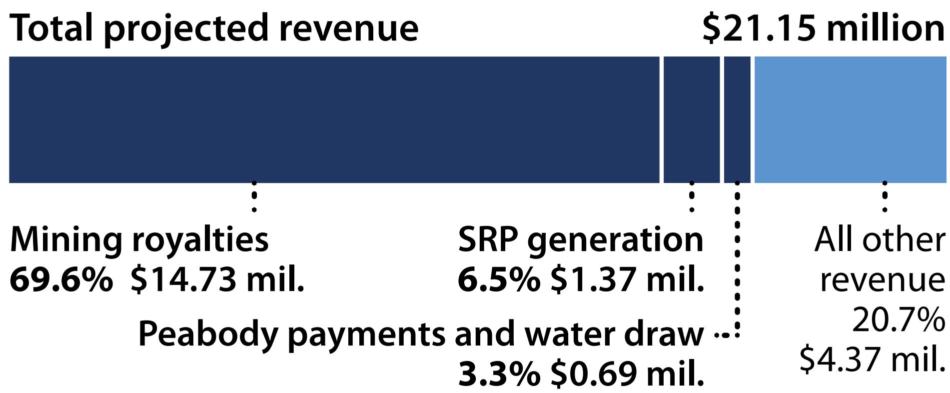
[5] Navajo-Hopi Observer, "NTEC discontinues efforts to acquire Navajo Generating Station," March 22, 2019.
[6] Navajo Times, "Council votes not to support NGS acquisition," March 22, 2019.
[7] Facebook, "Navajo Nation President Jonathan Nez and Vice President Myron Lizer," May 14, 2019.
[8] Cronkite News, "Hopi to elect new leaders as planned plant closure threatens tribe's financial future," November 8, 2017
[9] Hopi Tutuveni, "Hopi Tribe Facing Budget Cuts," November 20, 2018.

> *facing a huge loss of royalties that were given by the Peabody coal company."*

Hopi Budget Heavily Dependent on Mining

Fiscal year 2016 Hopi General Fund revenue projections.



Source: Hopi Tutuveni, January 2016

The Tutuveni three years ago published a budget breakdown showing that the Hopi government had assigned $16.8 million of its $21.1 million budget in the 2016 fiscal year to coal-related revenue.[10]

County governments in Arizona will feel the loss as well. In February in anticipation of NGS's closure, Coconino County, which includes the plant site, published a detailed breakdown on how it spends the more than $6 million in annual revenue it receives from NGS operations. The bulk of the revenue supports education through public schools, the community college and vocational training. Some goes to crucial public-health services and to fire and flood control.

The Coconino County analysis[11] notes also that Navajo Generating Station is a federal project created by an act of Congress in 1968 with about one-fourth of its ownership under the umbrella of the Department of Interior. It points out, too, that the plug is being pulled now contrary to promises made a generation ago:

> *"NGS was developed on tribal lands using tribally owned coal with the intention it would operate 70 years; instead the plant may close 25 years ahead of schedule, which will deeply impact tribal communities and the regional economy."*

And it states in no uncertain terms that because of its federal-project status, NGS's closure creates a situation now in which "the federal government has a trust responsibility to the Navajo Nation."

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[10] Hopi Tutuveni, "Tribal Council approves $21,154,750 FY 2016 Operating Budget," January 19, 2016.
[11] Coconino County, "Navajo Generating Station," February 2019.

NGS Impact to Coconino County Special Taxing Districts that Deliver Direct Services

Taxing District	FY16 (2015 Taxes)	FY17 (2016 Taxes)	FY18 (2017 Taxes)	FY19 (2018 Taxes)
Coconino County	$ 522,175.17	$ 511,665.80	$ 490,832.79	$ 560,699.49
Flood Control District	$ 36,772.08	$ 36,439.00	$ 35,467.82	$ 18,016.88
Public Health District	$ 227,626.90	$ 221,002.44	$ 216,089.95	$ 250,793.34
Library District	$ 232,725.54	$ 225,953.41	$ 220,930.80	$ 256,411.39
State School Equalization	$ 460,170.01	$ 442,889.58	$ 421,417.77	$ 475,626.26
FDAT	$ 91,050.95	$ 88,400.97	$ 86,435.58	$ 100,317.34
Page Unified School District	$ 3,793,705.63	$ 3,647,518.32	$ 3,728,028.03	$ 4,148,041.79
JTED-Caviat	$ 45,135.98	$ 43,836.49	$ 42,857.79	$ 49,827.68
Page Hospital District	$ 567,694.59	$ 547,675.59	$ 557,965.36	$ 464,035.38
Coconino Community College	$ 555,864.10	$ 549,325.04	$ 530,930.88	$ 597,813.11
TOTAL	**$ 6,532,920.95**	**$ 6,314,706.64**	**$ 6,330,956.77**	**$ 6,921,582.66**

*FDAT=Fire District Assistance Tax, JTED-CAVIAT=Joint Technical Education District-Coconino Association for Vocations, Industry and Technology District.

Navajo County, the other county that will be most affected by the closures, is facing a budget problem proportionally similar to Coconino County.

In sum, the fiscal impacts of the NGS and Kayenta Mine closures stand to devastate regional public services that have long been funded by a coal industry that is now in collapse—and the federal government has a responsibility to invest in a timely transition toward a more diversified economy.

Policy Action: Swift and Responsible Federal Intervention

Federal initiatives to quickly mitigate abrupt economic disruption have been used before—and they can be used again, in this case deployed with bipartisan congressional support toward managing an economic transition across a region that is losing its core tax-base industry—an industry that was in effect created by the federal government.

Some examples of federal intervention that have worked swiftly and to good effect include initiatives to help communities hurt by military-base closings, to revitalize regional economies devastated by natural disasters, and to rescue business sectors at risk of sudden collapse.

A Lifeline for the U.S. Auto Industry

In 2009, after heated public and private debate over whether it was the right thing to do, the Obama administration agreed to a request by Chrysler, Ford and General Motors for a government rescue of the companies' failing businesses. The specific ask at the time was for a $25 billion "bridge loan" to pay employees and suppliers, but **the total cost of the Detroit car-industry rescue when all was said and done was closer to $80 billion, not all of which was recouped by taxpayers—although most commentators saw it in retrospect as not just a regional win but a national one as well.**

> *"The net cost to tax-payers was tallied to be $9.7 billion. But even that number is pretty meaningless. Harder to calculate, but no less real, is the economic impact of 1.55 million workers paying taxes on good jobs, fueling the economic growth of their communities, etc."*[12]

Two of the chief architects of the rescue concluded eight years later that the investment had paid off, perhaps better than expected:

> *"We are both thrilled and relieved with the result: the automakers got back on their feet, which helped the recovery of the U.S. economy. Indeed, the auto industry's outsized contribution to the economic recovery has been one of the unexpected consequences of the government intervention."*[13]

While the size of the Hopi-Navajo problem is smaller in absolute terms than Detroit's was, it is no less regionally devastating—and indeed a federal reinvestment program for coalfield communities nationally would likely create far wider economic benefits than Detroit's bailout did.

Aid for Hurricane-Devastated Economies

In the wake of Hurricane Katrina in 2005, state and local leaders worked in bipartisan fashion with both sides of the aisle in Congress to attract money to rebuild and redevelop the City of New Orleans and environs.

The Bush administration worked with Sen. David Vitter, a Republican, and Mary Landrieu, a Democrat, to fashion a federal response by way of an initiative that pumped hundreds of millions of dollars into the regional economy.

At the end of the day, **$120 billion in federal funding went into Katrina-related recovery initiatives. Of that total, $76 billion went to Louisiana-based projects, an amount that was roughly three times the state's annual budget.**[14]

The federal response to Katrina is held up today as an example of "the wide range of federal programs that are brought to bear to help individuals and communities respond and recover from major disasters, as well as prepare and mitigate against future disasters."[15] And while Katrina was a regional *natural* disaster, the effects of regional economic disasters can be just as devastating.

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[12] Forbes, "As Obama Takes Victory Lap Over Auto Industry Rescue, Here Are The Lessons Of The Bailout," January 20, 2016.
[13] Journal of Economic Perspectives, "A Retrospective Look at Rescuing and Restructuring General Motors and Chrysler," Spring 2015.
[14] New Orleans Times-Picayune, "$120 billion in Katrina federal relief wasn't always assured," August 21, 2015.
[15] Congressional Research Service, "Federal Disaster Assistance After Hurricanes Katrina, Rita, Wilma, Gustav, and Ike," February 26, 2019.

Similarly, **the Disaster Relief Appropriations Act and accompanying Sandy Recovery Improvement Act[16] of 2013 appropriated $60 billion for communities affected by Hurricane Sandy in 2012.** It invested federal dollars in the region damaged by the hurricane through a long roster of federal agencies that included the Small Business Administration, the Department of Health and Human Services, the Interior Department, the Environmental Protection Agency, the Department of Labor, the Department of Education, the Department of Health and Human Services, and the Department of Housing and Urban Development, among others.

The Office of Economic Adjustment at the Department of Defense

The Coconino County analysis makes prominent mention of the Department of Defense's Base Realignment and Closure Program (BRAC), which was set up in the late 1980s to manage the impacts of closure or downsizing of military installations nationally through responsible transition initiatives.

This federal program seems an ideal model to apply to northern Arizona. Coconino County commissioners ask explicitly in the county analysis published in February that Congress take action by way of a BRAC-like initiative that will "authorize federal funding to minimize the socio-economic impacts from the closure of its federal facility Navajo Generating Station. "

The BRAC program lives on today in the department's Office of Economic Adjustment (OEA), which supports small-business assistance, industrial development, export promotion, manufacturing and supply-chain mapping, workforce and real estate development and technical assistance.[17]

The office's impact has been far-reaching, helping scores of communities across the country adjust to the economic upheaval associated with base closings.[18] A prime Arizona example of the program's success is the redevelopment of Williams Air Force Base,[19] which was closed in 1993, costing the immediate area 728 civilian jobs and a good part of its tax base. The airfield, long since annexed by the city of Mesa, was repurposed within six months of closing as the Phoenix-Mesa Gateway Airport, which has well over 1 million travellers annually. The OEA-supported Williams Economic Reuse Plan also led to creation of an "educational consortium" involving Arizona State University and Chandler-Gilbert Community College and construction of campuses that today have a total of about 15,000 students, and a private-sector aerospace hub that houses operations for more than 40 companies. Combined, the

[16] Congress.gov, "Public Law 113-2," January 29, 2013.
[17] OEA, "Industry Resilient Strategies."
[18] OEA, "OEA Project Profiles."
[19] OEA, "Williams Air Force Base, Arizona."

complex employs 4,500 people and contributes $1.3 billion annually to Arizona's economy.[20] [21]

The OEA's FY 2019 budget is $59.5 million,[22] a number that belies the power it can wield. The office in its heyday—when federal budget cuts mandated military base closings nationally—helped distribute billions of dollars locally over one decade in particular, from 1995-2005, to mitigate the effects of base closings.

A Department of Defense spending bill enacted in 1995 included three appropriations totaling $3.8 billion "for deposit into the Department of Defense Base Closure Account,"[23] of which a significant sum went to the OEA. A 1996 bill included three additional appropriations totaling $2.5 billion.[24] In 1997 the total was $2 billion;[25] in 1998, $1.6 billion;[26] in 1999, $672 million;[27] in 2000, $1 billion;[28] in 2001, $633 million;[29] in 2002, $561 million;[30] in 2003, $370 million[31] and in 2004, $246 million.[32] **Closure and realignment appropriations were wound done considerably after that, but the OEA still received an average of $140 million annually from 2005-2008.[33]**

All of these appropriations had bipartisan support, all remained "available until expended," and a core construct of the program required close consultation and involvement with affected communities. IEEFA in 2017 published a report describing how just such a program could be inclusively administrated in Arizona[34]—that plan could inform coalfield investment programs nationally too.

A key feature of the BRAC/OEA model includes direct replacement revenues for tribal and government budgets.

[20] U.S. Air Force Civil Engineer Center, "Williams Today."
[21] Phoenix-Mesa Gateway Airport, "History and Mission."
[22] Congress.gov, "Department of Defense Appropriations Bill, 2019," June 20, 2018.
[23] Govinfo.gov, "Public Law 104-32," October 3, 1995.
[24] Govinfo.gov, "Public Law 104-196," September 16, 1996
[25] Govinfo.gov, "Public Law 105-45," September 30, 1997.
[26] Govinfo.gov, "Public Law 105-237," September 20, 1998.
[27] Govinfo.gov, "Public Law 106-52," August 17, 1999.
[28] Govinfo.gov, "Public Law 106-246," July 13, 2000.
[29] Govinfo.gov, "Public Law 107-64," November 5, 2001.
[30] Govinfo.gov, "Public Law 107-249," October 23, 2002.
[31] Govinfo.gov, "Public Law 108-132," November 22, 2003.
[32] Govinfo.gov, "Public Law 108-324," October 13, 2004.
[33] Fas.org, "Economic Development Assistance for Communities Affected by Employment Changes Due to Military Base Closures (BRAC)" June 16, 2009.
[34] IEEFA, "A Transition Plan for Communities Affected by the Closings of Navajo Generating Station and Kayenta Mine," June 2017.

Conclusion/Recommendation: Immediate Federal Investment Is Crucial; Bipartisan Support Is Possible

As Navajo Generating Station and Kayenta Mine approach closure over the next several months, the federal government still has time to take timely action to contain some of the regional economic damage.

Bipartisan support for effective legislation is possible—a national program would affect Democratic and Republican districts alike—modelled after federal programs that helped right the Detroit auto industry; initiatives that saved the economies of Louisiana and the Northeastern U.S. after Hurricanes Katrina and Sandy; and well-funded Department of Defense programs to buffer the community effects of military base-closings and downsizing in dozens of states.

Tribal economies are no less worthy of comparable federal intervention, and the same is true as well of struggling coalfield communities elsewhere.

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The Institute for Energy Economics and Financial Analysis conducts research and analyses on financial and economic issues related to energy and the environment. The Institute's mission is to accelerate the transition to a diverse, sustainable and profitable energy. www.ieefa.org

About the Authors

Karl Cates

IEEFA Research Editor Karl Cates has been an editor for Bloomberg LP and the New York Times, and a consultant to the Treasury Department-sanctioned community development financial institution (CDFI) industry. He lives in Santa Fe, N.M.

Pam Eaton

Public-policy consultant Pam Eaton has worked on western energy and conservation policy for more than two decades. She is the founder of the consulting firm Green West Strategies in Boulder, Colo., and is a newly appointed member of the Colorado Oil and Gas Conservation Commission.