

## Chapter 55

# Climbing out of the energy hole

As the impacts of the West Coast Energy Crisis reached the Pacific Northwest in 2000 and 2001, and wholesale power prices increased on the open market by 10 to 20 times, many of the Bonneville Power Administration's former customers returned. The BPA found itself oversubscribed by more than 3,000 megawatts and quickly spent its cash reserves purchasing market power. In 2001 alone, the BPA spent nearly \$3 billion buying power for its customers, according to John Harrison's 2008 BPA history. By 2003, the BPA had raised its rates three times in an effort to recover its financial health. With deregulation of power markets, the BPA went from being overpriced and concerned about retaining customers in 1996 to being underpriced and concerned about too many customers and in a financial crisis that forced rate increases in 2003. <sup>1</sup> The blame for the problem fell on insufficient water reserves for hydropower because of drought, California's poorly conceived deregulated power market, manipulation of the California market by power providers, miscalculations by the BPA - and the Pacific Northwest aluminum industry.

### **A gloomy forecast**

In December 2002, the Northwest Power Planning Council issued a report for the BPA forecasting power demand by the Pacific Northwest's aluminum industry. At full capacity, the region's smelters accounted for about 40% of U.S. aluminum production and about 6% to 7% of global production, while consuming about 3,145 megawatts, which was about 15% of the Pacific Northwest's total power demand. Although electrical use by the smelters tended to be uniform, "the aluminum plants have faced difficulty operating consistently over the past 20 years because of increased electricity prices and aluminum market volatility," the report said. The regional industry's position "has been deteriorating since 1980" because of declining metal prices and the addition of more-efficient aluminum smelting capacity throughout the world. The BPA had been supplying most of the smelters' power demand in the past, but the BPA's wholesale rates increased 500%

from 1979 to 1984 as the region's demands outstripped supply by the federal hydroelectric dams and the BPA's mix of hydro and thermal power.<sup>2</sup>

The Pacific Northwest Electric Power Planning and Conservation Act in 1980 included a provision for providing aluminum plants with long-term contracts for up to 20 years with higher rates that would be used to cover the BPA's new mandate to buy power on the open market for residential and small farms served by investor-owned utilities. The 1980 act also contained interruptibility provisions for aluminum plants. With deregulation in the mid-1990s, many aluminum plants opted to buy cheaper power on the open market and left the BPA. In the 1996 rate case, the BPA reduced the amount of energy available for the region's aluminum industry to about 60% of their total demand. In the 2001 rate case, the BPA reduced the allocation even further – to about 45% of demand, or about 1,425 megawatts. The smelters at full capacity would need to find more than half their power on the open market. BPA rates for aluminum plants were tied to global aluminum prices in the 1980s in an attempt to keep some smelters from becoming swing plants, reducing and increasing production depending on prices, but global aluminum prices had declined from 1960 to 2001 by 0.8% per year, with an even steeper decline from 1980 to 2002. “There does not appear to be much optimism for a quick recovery of aluminum prices,” the Northwest Power Planning Council report said. “Some analysts expect the global aluminum market to remain in surplus until 2005.” The region's smelters had been left behind by steadily improving aluminum technologies, and “a growing share of the regional smelting capacity has become swing capacity,” the report said.<sup>3</sup>

The 2000-2001 West Coast Energy Crisis forced the regional aluminum industry to entirely shut down, and many plants never restarted when prices came back down. Spot market power prices moved to the \$35 to \$40 per megawatt-hour range, where most smelters could not operate profitably. Global competition, especially in China, also threatened the regional plants. The Northwest Power Planning Council developed a model to study which of the 10 regional smelters could continue to operate profitably in the future. Aluminum prices in the model were varied between \$1,050 and \$2,250 per ton in \$100 increments and

power prices were varied between \$20 and \$40 per megawatt-hour, creating 91 possible combinations. “Aluminum prices have seldom been below \$1,200 per ton (in 2002 prices) in the past 20 years,” the report said. With aluminum prices dropping about 1% per year, they might average \$1,500 per ton over the next 20 years, the report said, while power prices were expected to range from \$35 to \$40 per megawatt-hour over the next 20 years. <sup>4</sup> That was a gloomy prospect for regional aluminum plants.

With the aluminum industry reducing production because of lower metal prices and higher operational costs, the Northwest Power Planning Council model forecast the regional aluminum industry demand at 880 megawatts. The model also found that offering 100 megawatts to each smelter at \$28 per megawatt-hour would have “a relatively small effect on expected aluminum operations” because the smelters needed to run at higher capacity to be profitable and they would have to go to the open market for the additional power. Despite these findings, the council didn’t expect many regional smelters to close permanently because their depreciated capital costs allowed them to operate as swing plants whenever aluminum prices were relatively high and power prices were relatively low – but also because of the expensive clean-up costs they would face if they shut down. “The result is that the region might retain a large, but uncertain, electricity demand,” the report concluded. <sup>5</sup>

While the Northwest Power Planning Council proposed severely reducing power supplies to the Pacific Northwest’s aluminum smelters and other direct-service industry customers, the BPA was considering a similar proposal of its own. At full capacity, the nine aluminum remaining plants in 2002 required 2,800 megawatts of power, about six times what the council recommended the BPA should supply them. The BPA made 1,440 megawatts available to the plants after the West Coast Energy Crisis, but most of the plants remained idled. The council called for the BPA to initially offer up to 100 megawatts per plant. The future of many of the Pacific Northwest plants was questionable because of age and inefficiency, and the industry’s average power price need of \$20 per megawatt-hour was far below the BPA’s current rate, the council noted. Many of the plants had become “swing” plants that could operate profitably only when aluminum prices were high or

energy prices were low. <sup>6</sup> The council also commented on the volatility of the West Coast power markets, noting that “the West is headed toward repeated boom-and-bust cycles of high power prices followed by overbuilt plant capacity unless somebody steps in to break the cycle.” Washington State University environmental science professor Andrew Ford blamed the cycles on the recent transformation of power into a commodity. <sup>7</sup>

The Northwest Power Planning Council recommended that the BPA structure aluminum plant contracts so the BPA could interrupt power to take advantage of market prices for power, but the council wanted the interruptibility provision to contain safeguards for aluminum workers. The contract could help keep plants running when aluminum prices were low if power supplies were adequate and it did not burden other BPA customers. Aluminum smelter loads eventually would become “volatile and uncertain for the region,” and the council recommended that the smelters reduce their long-term dependence on the BPA. The council also recommended that the BPA provide credit to smelters that developed electrical generating resources that could be dedicated to regional smelter loads. <sup>8</sup> In 2002, the BPA modified its power contracts with the Pacific Northwest aluminum smelters. The BPA agreed to provide up to 45% of the aluminum companies’ energy needs, but the offer would not become available until the end of summer 2003. The price for power increased about 50% to \$35 per megawatt-hour. The contracts also stated that smelters would not get paid for reducing use, and allowed the BPA to collect “surcharges” if the agency had to purchase market power to meet its demand. <sup>9</sup>

The global aluminum industry was poised for an upturn in fall 2001 – inventories were low and orders were up by 5% in August – but the market was set back by the Sept. 11, 2001 terrorist attacks against the U.S. that pushed recovery back by about two quarters. At the same time, the West Coast Energy Crisis continued to plague some aluminum producers, and Chinese demand for aluminum was low because of leftover inventories from 2000, when China imported too much aluminum. <sup>10</sup> In April 2001, total shipments of primary aluminum by the U.S. aluminum industry, including exports, fell 12.6% from the same month in 2000. Shipments of primary aluminum to domestic

markets declined 13%, and shipments of milled aluminum products declined 14.7%. Year-to-date shipments were down by 12.7%. <sup>11</sup>

On Oct. 10, 2001, Moody's Investors Service announced it was changing its rating on stocks for four U.S. aluminum producers – Kaiser, Century Aluminum, Golden Northwest Aluminum and Ormet Corp. Moody's blamed low and falling metal prices, potentially lower shipments and the derivative impact this would have on each firm's liquidity. All four companies were hurt by global metal prices that had dropped 26% from the end of January to about 59 cents a pound in October. Smelter closures resulting from the West Coast Energy Crisis and curtailments in Brazil helped prevent prices from dropping even more dramatically. The global economy declined significantly after the 9/11 terrorist attacks, with metal stocks at the London Metal Exchange up 5% and prices down 3 cents per pound. Kaiser also was facing significant asbestos-related liabilities and debt-refinancing problems. By June 30, 2001, Kaiser was facing about \$650 million in asbestos-related health claims, but it would be paid \$505 million by insurance companies. Overall, Kaiser expected insurance companies would pay for about 75% of the asbestos costs. On the bright side, Kaiser's Gramercy alumina refinery in Louisiana was back up to 100% production. <sup>12</sup>

The West Coast Energy Crisis had severely impacted Montana's manufacturing sector. In his Jan. 30, 2002 forecast, University of Montana economist Paul Polzin said the outlook for Montana's economy largely depended on the success of several large industrial companies, including the Columbia Falls Aluminum Co., Jore Manufacturing, Stillwater Mining, ASARCO and Montana Power. Polzin forecast 1.2% growth in the state's economy in 2002, down from 2.1% in 2001. High power prices had forced CFAC to shut down for about a year, Jore had declared bankruptcy, Stillwater had laid off about 300 contracted construction workers at its new mine and cut production estimates at that mine in half, and ASARCO cited low market prices in shutting down its East Helena lead smelter. <sup>13</sup> The five businesses accounted for more than 1,000 layoffs in Montana. Other factors impacting the state's economy included a longer-than-expected national recession, continued volatility in farm income, labor shortages

and lingering effects on the travel industry caused by the 9/ 11 terrorist attacks. <sup>14</sup>

## **CFAC restarts**

In the midst of this uncertainty in the Pacific Northwest aluminum industry, CFAC's parent company, Glencore International AG, decided to buy another regional smelter. The aluminum plant built by Alcoa on the Columbia River at Vancouver was the oldest smelter in the Pacific Northwest. Production began there in September 1940, and employment peaked at 1,200 workers in the 1970s. The smelter closed down in June 1986 during a nationwide labor dispute, but private investors formed Vanalco to purchase the plant from Alcoa in October 1986, and the smelter was back in operation by June 1987. High power prices forced the plant to close in June 2000, eliminating 600 jobs, and Vanalco filed for Chapter 11 bankruptcy protection in January 2001. Glencore offered to buy the 115,000 ton-per-year smelter for \$24.25 million in federal bankruptcy court in Tacoma on March 25, 2002. <sup>15</sup> By the end of February 2003, there was no word on a future restart at the renamed Evergreen Aluminum smelter. "My understanding is that the owners (Glencore) acquired it at a low price, so they don't have a lot of money invested in the plant, and for them it might be something to have in reserve so if the industry picks up, they could produce," Terry H. Morlan, an economic analyst for the Northwest Power and Conservation Council in Portland, commented. <sup>16</sup>

On Feb. 12, 2002, CFAC announced plans to restart Potline 4 in March using power purchased on the open market. CFAC would be the first aluminum smelter in the Pacific Northwest to restart since all 10 were idled by the West Coast Energy Crisis in 2000-2001. The smelter's 305 workers would continue to be paid through 2002 even if the plant didn't restart. CFAC had an option to purchase 68 megawatts from the BPA in October 2002, but power prices were considered too high to increase production at the time of the restart announcement, CFAC Spokesman Haley Beaudry said. <sup>17</sup> The very same day, Kaiser Aluminum & Chemical Corp. filed for Chapter 11 protection in the U.S. Bankruptcy Court for the District of Delaware. Beaudry said Glencore made the decision to restart CFAC before Kaiser made its announcement. The plant had shut down completely for the first time in its long history in January 2001. CFAC would purchase power from

several sources in the open market. Potline 4, including 120 reduction pots that had been recently upgraded for magnetic compensation, would be energized in mid-March 2002, Beaudry said. Pots were left partially filled with aluminum when they were de-energized so restarting was expected to go smoothly. Beaudry said it would take about 20 days to get all 120 pots fully operational and producing metal. CFAC's restart would not affect the local employment picture as the plant had sufficient workers to operate one potline, Beaudry said. <sup>18</sup>

While global aluminum prices continued to be weak, a new twist in the power picture might have influenced CFAC's decision. The BPA was paying some aluminum companies about \$20 per megawatt hour not to use BPA power, but open-market wholesale power prices had dropped to below \$20. This meant some aluminum companies could continue collecting money from the BPA while purchasing power elsewhere on the open market. BPA Spokesman Bill Murlin said the BPA would like to see the aluminum plants restart for economic reasons and to help small Pacific Northwest communities. Deals struck with the BPA differed from company to company, Murlin said. McCook Metals, which owned the former Reynolds plant in Longview, Wash., and Golden Northwest Aluminum, which owned smelters in The Dalles, Ore., and Goldendale, Wash., were required to start purchasing power from the BPA as soon as April 2002. "What they will do with that power is a good question," Murlin said. <sup>19</sup>

CFAC had a five-year contract with the BPA through Sept. 30, 2006, for 171 megawatts of power, which was about half the power needed to operate at full capacity, but the company was being paid by the BPA not to use the power. CFAC had an option to purchase power for one potline from the BPA on Oct. 1, 2002, but was not obligated to purchase the power. CFAC also had an option to purchase power for an additional 1 ½ potlines on Oct. 1, 2003. If CFAC continued to receive about \$20 per megawatt-hour from the BPA for not using BPA power and then purchased open-market power for one potline at about \$20 per megawatt-hour, the company could enjoy free power and continue to receive about \$50,000 per day from the BPA. In the past, aluminum companies had said they could not profitably operate smelters unless wholesale power stayed under \$30 per megawatt-hour. Combined with a \$20 payment from the BPA, CFAC could afford power prices up to

\$50 per megawatt-hour – allowing breathing room for possible future power price increases. But power prices were only half the plant-restart question – a worldwide economic recession had caused a severe slump in global aluminum prices. Aluminum prices on the London Metal Exchange closed Feb. 12 at 62 cents per pound, compared to 80 cents per pound in January 2000. <sup>20</sup>

In a Feb. 19, 2002 editorial, the Daily Inter Lake praised CFAC for sticking to its promise to restart in 2002. The newspaper also took note that CFAC was the first of the Pacific Northwest’s aluminum plants to restart since the West Coast Energy Crisis shut down all 10 smelters. “We think that has something to do with a long history of cooperation between the community and the company,” the editorial said. “When the plant faced shutdown in the 1980s, for instance, Columbia Falls and the rest of the Flathead rallied support to keep it going.” The editorial referred to Kaiser’s recent announcement that it would seek Chapter 11 protection in federal bankruptcy court. “It would have been easy for Glencore International to have pocketed the profits it made last year when the plant was shut down, and to have walked away from Columbia Falls forever. Many people in the valley, assuming the worse, were sure just that would happen.” <sup>21</sup>

CFAC energized the first 10 reduction pots on March 13, 2002, as the plant began the process of restarting all 120 of Potline 4’s pots. Work was still continuing on installing new anode flexes to change the potline from 4-legged pots to 3-legged pots for magnetic compensation. <sup>22</sup> Anodes on CFAC pots were connected to the 100,000-amp buss in the basements by rigid risers and flexible connections at the anodes’ four corners. The connections had to be flexible because anodes were raised and lowered to maintain correct pot voltage. To make a 3-legged pot, two flexes on the same side of the pot were combined into one larger one connected at one corner of the anode. This created an asymmetrical geometry that changed the magnetic flux lines generated by the high current running through the flexes. According to Montana Department of Environmental Quality estimates, CFAC emitted 14,746 pounds of fluoride during the first 20 days of the restart period, 9,331 pounds for the second month, 14,678 pounds for the third month, and 11,002 pounds for the fourth month. <sup>23</sup>

On March 22, 2002, Beaudry announced CFAC's plans to restart a second potline as soon as the first one was up and running. Both potlines were expected to be operational by May. Beaudry said CFAC's decision came nine days after the Potline 4 restart began and stemmed from the company's ability to acquire sufficient low-cost power from numerous sources on the open market. CFAC remained the only smelter in the Pacific Northwest to restart since all 10 shut down in early 2001. Three of the six companies with smelters in the Pacific Northwest had declared bankruptcy - Vanalco with a smelter in Vancouver in January 2001, McCook Metals with a smelter in Longview in August 2001, and Kaiser with smelters in Tacoma and Spokane in February 2002. BPA Spokesman Ed Mosey said Golden Northwest, with smelters at The Dalles and Goldendale, was scheduled to resume partial production beginning April 1, 2002. There was no word from Alcoa about a restart at its smelters in Wenatchee and Ferndale. <sup>24</sup>

Beaudry said CFAC originally had planned not to restart a second potline until October 2003, but lower wholesale power prices and payments from the BPA not to use power helped make restarting economical. With spot market prices for power in the Pacific Northwest at about \$45 per megawatt-hour, the \$20 BPA payment brought the cost to CFAC down to \$25. Beaudry said CFAC had numerous power contracts, with "everyone you can name" to power up the potlines, and some long-term power contracts were as low as \$20 per megawatt-hour. Forty pots were in operation by the time of announcement, he said. Experienced plant workers said it was the "smoothest restart they've ever seen," Beaudry said. Meanwhile, aluminum prices on the London Metal Exchange remained as low as 63 cents per pound. <sup>25</sup>

### **A partial resurgence**

New York-based metals analyst Raju Daswani told American Metal Market on March 13, 2002, that 300,000 to 400,000 tons of aluminum smelting capacity in the Pacific Northwest might be restarted in 2002 using open-market power. The BPA was selling power for about \$35 per megawatt-hour. CFAC had already restarted, and Alcoa's Intalco smelter in Ferndale was considered likely to restart. Daswani noted that the U.S. index of leading economic indicators had gone up for four consecutive months through January 2002, and a solid housing market and improving numbers in automotive manufacturing backed up his

forecast. "North America led the aluminum sector into the downturn, and we believe it will provide a spark that will lead to a global revival in demand," Daswani said. In 2001, primary aluminum production in the Western nations saw its sharpest decline in 20 years, but Daswani forecast a rebound of 2.8% in 2002 to just under 9.7 million tons, close to production levels in 1999. He also forecast consumption increases of 4.4% in 2002 and 8% in 2003. Supporting that increase was about 1.5 million tons of surplus alumina. Daswani also said idled capacity in Brazil would be restarting in 2002. <sup>26</sup>

Robert Gavin wrote about the rebounding Pacific Northwest aluminum industry in the May 1, 2002, Wall Street Journal. "The surprising comeback is testament to one of the Northwest's most durable industries, which has exploited changing energy market conditions to defy predictions of its demise for decades," he said. Gavin was backed by Seattle economist Richard S. Conway Jr. "Long-term conditions have been against (Pacific Northwest) aluminum smelters for decades, but if they've shown anything, it's that they're tenacious," Conway said. Spot prices for power in the Mid-Columbian energy market index were less than \$20 per megawatt-hour. By May, CFAC and Alcoa's Intalco plant were partially restarted and restarts were planned at Goldendale, The Dalles and Longview. No immediate restarts were planned for Wenatchee, Tacoma, Spokane and Vancouver. <sup>27</sup>

By May 2002, wholesale power prices in the Pacific Northwest had fallen from \$200 per megawatt-hour during the West Coast Energy Crisis to around \$20. The Northwest Power Planning Council forecast low-to-moderate power prices for at least five more years. Many Pacific Northwest aluminum plants had reinvested their earnings from reselling power to the BPA during the energy crisis into efficiency measures or building power-producing plants. Golden Northwest recently completed building a 24-megawatt wind project. CFAC "reconfigured its power-delivery system to produce more aluminum with less electricity," while Alcoa invested in maintenance, improving environmental systems and modernizing its Intalco and Wenatchee plants. Because of these investments, "About half the (Pacific Northwest) smelter capacity has long-term viability," said Michael Gambardella, a metals analyst for J.P. Morgan Securities Inc., in New York. But things were not expected to return to how they once were.

Besides the bankruptcy of Kaiser Aluminum Corp., United Steelworkers officials predicted the regional aluminum industry would be “lucky to see employment return to half the 10,000 in the region a few years ago.” Local impacts were much better. In Columbia Falls, CFAC paid its workers about twice the county’s median annual income and each aluminum plant job created 2.4 indirect jobs. Ray Negron, owner of the Cimarron Deli in Columbia Falls, said his business fell 60% during the time CFAC was shut down in 2001-2002. “There’s a major trickle-down effect,” he said. “And now, there’s a big sigh of relief.”<sup>28</sup>

CFAC wasn’t done yet – on May 10, 2002, Beaudry announced that CFAC would fire up a third potline with open-market power and increase production to 60% of capacity by mid-June. BPA was paying the company about \$20 per megawatt-hour to not use half its power, so the company stood to lose about \$14,400 per day in BPA payments by going 10% past half capacity.<sup>29</sup> On Dec. 8, Beaudry said improvements at the smelter during the time it was shut down by the West Coast Energy Crisis had made it more efficient than ever before. “The people here have made it one of the most efficient plants in the United States, maybe even the world,” he said. The plant was producing about 100,000 tons per year, but aluminum prices had dropped from a five-year high of \$1,450 per ton to \$1,300, according to the newsletter Alunet. The fact that other Pacific Northwest aluminum producers were shut down also was not helping CFAC, Beaudry said. “It’s like having only one football field in the country,” he said. “If you have only one, there’s not much interest in football.”<sup>30</sup>

In 2003, the capacity of the Pacific Northwest aluminum industry was about 1.6 million tons per year – about 40% of U.S. capacity and 6% to 7% of global capacity. Compared to aluminum smelters worldwide, the Pacific Northwest smelters ranked among the most costly to run – by the 1990s, half the region’s smelters were “swing” plants, partially shutting down as market prices changed, while the other half ran at full capacity. Electrical costs accounted for about 30% of the total cost of aluminum production. The Pacific Northwest aluminum industry used about 3,147 megawatts at full capacity, which was about 7% of the total power demand in the Pacific Northwest and about 15% to 20% of the BPA’s total load. The BPA marketed up to 22,500 megawatts of power from 31 hydroelectric dams, but energy production varied from

wet to dry years, with 60% more energy available in a wet year over a dry year.<sup>31</sup>

By the end of February 2003, only three of the region's 10 aluminum smelters were operating – CFAC had three of the plant's five potlines operating, Golden Northwest had a limited restart in Goldendale, and Intalco was operating two of its three potlines. Northwest Aluminum in The Dalles was only operating its casting facility, and Kaiser's Trentwood rolling mill in Spokane was at reduced operations. The Alcoa smelter in Troutdale was closed with plans for dismantling, the Kaiser smelter in Tacoma had been sold to the Port of Tacoma for redevelopment, Kaiser's Mead smelter in Spokane was closed indefinitely, the Longview smelter had been closed for a year, the Vancouver smelter had been closed for 2 1/2 years, and the Wenatchee smelter was ready for a restart. Two years earlier, the aluminum industry in Washington State alone was a \$2.6 billion industry employing 7,510 workers averaging \$49,330 per year, about 1.7 times the state's average. According to David Brooks, a reporter for American Metals Market, only 15 of the 23 aluminum smelters in the U.S. continued to operate. "The primary industry is slowly dying because power is such an important factor," Brooks said – there were too many demands on power by other sectors of the economy. But while aluminum production was declining in the U.S., it was increasing elsewhere in the world.<sup>32</sup>

On May 23, 2003, economist Terry Morlan told members of the Pacific Northwest Regional Economic Conference that the region's time as a major source of the world's aluminum was likely past because of the high cost of electricity and the age of the smelters. At one time, the region produced 43% of the nation's aluminum, directly employing 10,000 people in good jobs and indirectly employing 40,000 more in the region. Power prices increased from around \$5 per megawatt-hour 40 years earlier to \$35, while the price for aluminum metal increased only 1% per year, Morlan said. Expansion of aluminum production capacity elsewhere in the world added to the problem.<sup>33</sup> Some regional smelters were already headed for the scrap yard. Longview Aluminum began selling off its alumina stockpile in January 2002, earning the company about \$3.9 million by May 2003 – including \$3.66 million selling alumina to CFAC in 2002. The information came from

bankruptcy filings by the company, the Longview Daily News reported. Representatives of the Federated Aluminum Council said the decision to sell the material made it harder to restart the plant. As of March 31, 2003, the Longview plant had on hand 7,000 tons of alumina, 3,500 tons of “aluminum in process” and 4,350 tons of calcined coke, all of which were estimated to be worth millions of dollars. The plant also earned \$29 million from the BPA in 2002, the final payment from the \$226 million the company made selling power back to the BPA during the West Coast Energy Crisis.<sup>34</sup>

## **The power cycle**

The unstable open market for wholesale power soon put CFAC to the test. By March 4, 2003, power prices in the Pacific Northwest had climbed to about \$60 per megawatt-hour, spiking at about \$130 per megawatt-hour one week earlier amid fears of natural gas shortages and drought. BPA Spokesman Ed Mosey said the BPA’s bigger customers were worried they might not ever restart. “Honestly, there is an air of desperation in the region,” he said. Haley Beaudry said CFAC had spread its power contracts among dozens of companies in a mixture of short-term and long-term contracts that provided the smelter with power at different times of the day. Aluminum smelters in the Pacific Northwest could not profitably produce aluminum if prices climbed above \$30 per megawatt-hour, he said, and every dollar increase for power cost CFAC about \$1.6 million per year at 60% capacity. “It’s absolutely correct that you can’t make aluminum with \$60 power. It just doesn’t work. Period. But we’re not buying \$60 power,” Beaudry said. “If aluminum was \$2 per pound, you could pay a lot for power.” But aluminum was selling for about 65 cents per pound, he noted.<sup>35</sup>

On March 11, 2003, CFAC announced it was shutting down two of its three operating potlines and laying off 175 of its 330 employees. The company had numerous open-market power contracts that had to be dealt with after the curtailment – some contracts required CFAC to keep purchasing the power. Beaudry said some of the power could be sold off at a loss.<sup>36</sup> CFAC General Manager Steve Knight called it “the perfect storm” – a combination of high power and high alumina prices coinciding with low metal prices. Power prices were affected by drought, spiking natural gas prices and fear of war with Iraq. Alumina

prices were affected by strong international competition, particularly from China's rapidly growing aluminum industry. Knight said alumina prices had doubled over 2002 prices.<sup>37</sup> Beaudry told local media Chinese aluminum production had increased from 2.8 million tons in 2000 to 4.3 million tons in 2001 and 5.1 million tons in 2002. As a result, alumina prices doubled since 2002, he said.<sup>38</sup> The curtailment process for Potlines 3 and 4 took only two days to complete – Pot 751 was the last pot tapped on March 15. T-bar ingots were laid end to end to create temporary “moats” to hold the 750 tons of molten cryolite bath tapped from the pots in Potrooms 5, 6, 7 and 8. Once the bath had solidified, the T-bars were removed, leaving a solid slab of cryolite that could be crushed later for storage.<sup>39</sup>

By mid-April, CFAC began distributing fliers advising workers scheduled for layoff to attend workshops. The text at the top of the fliers said, “You are invited to attend an informational workshop, Tips for the wise & making the best of your layoff from CFAC.” The fliers said the company was making efforts to obtain funding for training, relocation and job searches. Among the “items of interest” to be discussed at the workshop – basic tips for filling out unemployment forms, health insurance options with COBRA and CHIP for children, tips for surviving a layoff, basics of money management, and funding and explanation of retraining programs. The workshop was sponsored by Flathead Job Service, Flathead Valley Community College, Project Challenge and CFAC.<sup>40</sup> On May 28, 2003, Sen. Max Baucus' office announced that \$619,278 in National Emergency Grant money was made available by the Labor Department to help laid-off CFAC workers. The funds would be earmarked for recruitment, outreach assessment, job search assistance, out-of-area job searches, basic skills training, customized skills training, classroom and on-the-job training, and supportive services such as childcare, transportation, tools and clothing required for employment and limited medical attention.<sup>41</sup>

Montana's economy was lackluster by May 2003, creating new jobs at the rate of 0.4% per year, the slowest economic start in more than a decade. Only 1,500 jobs were created over the past year. Declines in manufacturing, transportation, utilities and warehousing were affecting the overall statistics. The biggest factors were the closing of timber mills in Belgrade and Libby and layoffs at CFAC. Unemployment in

Flathead County in May was 5.1%.<sup>42</sup> On June 27, 2003, the Labor Department approved giving Trade Adjustment Assistance Act benefits to CFAC workers laid off since March 2003. Sen. Baucus wrote to Labor Secretary Elaine Chao when the trigger date for the act came and no assistance had been made. Baucus was one of the authors of the act, which was designed to help workers who were negatively impacted by international competition. More than 200 workers were laid off at CFAC. Benefits available to the workers included money for tuition and supplies for classroom training and half their wages for on-the-job retraining, money for job searches and interviews, moving expenses – including a lump sum payment of \$1,250, and possibly health insurance assistance. This assistance came in addition to the \$620,000 in National Emergency Grant money the workers received earlier in June.<sup>43</sup>

## **The swing plant**

The workers at the CFAC aluminum plant and the residents of the Flathead Valley might not have appreciated the language, but the smelter had become a “swing plant,” a point that could be made without mincing words by the company’s owner – Glencore. On April 18, 2003, American Metal Market published an interview with Glencore Chairman Willy Strothotte about the future of its Vanalco and CFAC aluminum smelters. Strothotte said both smelters could operate in the future, unlike other smelters in the Pacific Northwest, depending on the tradeoffs of alumina, electricity and aluminum prices. The plants didn’t cost much to purchase or to operate, he said. “The capital cost to buy (Vanalco) was very low and the operating cost structure is not dissimilar to Columbia Falls,” Strothotte said. “It’s about how power, aluminum and alumina move and trend in relation to one another that will determine when we shut or open... We need a location where we can toll power and alumina into aluminum. It’s an option... Why produce aluminum when you can sell alumina or power separately at superior terms to the metal price?” Strothotte also said previous shutdowns at CFAC were done in cooperation with the work force there.<sup>44</sup>

The Hungry Horse News published a front-page story on Strothotte’s comments on May 1 under the headline “Glencore boss pulls no punches on CFAC future,” but the big news came from Ed Mosey, who

warned about three changes coming on Sept. 30. CFAC had a take-or-pay contract with the BPA that ended Sept. 30 – if CFAC opted not to take the power, they were obligated to pay the BPA the difference between what the BPA paid for the power and what the BPA could sell the power for in the open market. The BPA also was considering raising wholesale power rates by 15% by Sept. 30 to make up for a forecast \$900 million deficit over the next four years, Mosey said. The BPA was selling power for \$32 per megawatt-hour and expected that to increase to \$34. CFAC also was receiving \$20 per megawatt-hour from the BPA not to use its contracted power, but that two-year deal would expire Sept. 30. If aluminum metal prices remained low while alumina remained high, CFAC might not continue operating, Mosey said.<sup>45</sup>

In the midst of all that tough news about CFAC came word that the company was selling some of its land in the Flathead. In mid-summer 2003, CFAC began listing for sale a 160-acre parcel of land north of the plant. The site was described as: “Great opportunity! Just 5 minutes to town. Old homestead situated at base of Teakettle Mountain with expansive views.” The asking price was \$960,000. According to the online multiple listing database, the partially wooded site with meadows and trees had a spring, no covenants, no waterfront, no utilities, no outbuildings and a gravel access road.<sup>46</sup> On Feb. 17, 2004, the Columbia Falls City Council unanimously approved granting an easement across city-owned property around the Cedar Creek Reservoir to the 160-acre property below Teakettle Mountain that CFAC had listed.<sup>47</sup>

As 2003 wound down, rumors among CFAC workers and locals suggested that the Columbia Falls smelter was on the verge of closing for good. The Daily Inter Lake published an article on CFAC’s financial condition on Dec. 7. About 140 workers were employed at the smelter. “There’s no new news,” General Manager Steve Knight said. “Nothing has changed. Things look pretty ugly, but that can’t go on forever. All we’re trying to do is hang on until the situation improves.” Knight said the smelter’s long-term viability was a function of the relative prices of power, alumina and aluminum. “Historically, the price ratio of alumina to aluminum has been about 12 to 15 percent,” Knight said. “Now, it’s over 20 percent, and maybe 25 percent. It can’t stay that way forever – fundamental economics say the prices have to equal out – but we

don't know when that's going to happen. Right now we're running the plant at a loss, hoping things will change." Knight said some aluminum plants were shutting down and selling their alumina because they could make more money that way, similar to the way plants shut down during the West Coast Energy Crisis and sold their power. <sup>48</sup>

But gloomy Flathead residents might not have been surprised to hear that the power supply situation in the Pacific Northwest had changed by early 2004. The story of BPA power and the Columbia Falls smelter for several decades had been a cycle of good news followed by bad news followed by good news. The good news announced on Feb. 27, 2004, by the Northwest Power and Conservation Council was that the Pacific Northwest had 1,000 average megawatts of surplus electricity through 2008, assuming the lowest average annual water supply and no significant changes in demand growth. Citing two draft reports, the council said the surplus resulted from the addition of new generating capacity and energy conservation efforts since the West Coast Energy Crisis, bolstered by weak demand in a regional economy that had not recovered from the crisis. The council also reported that wholesale power prices should remain stable at about \$36.50 per megawatt-hour, in 2000 dollars, through 2025. Natural gas provided the fuel for about 15% of the region's power supply, the council noted, but other energy sources would be needed by 2010, including coal and wind, as well as more energy conservation. The council said forecasts could be affected by changing natural gas prices, unexpected changes in demand, limitations to transmission and changing transportation costs for coal.

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The Northwest Power and Conservation Council's draft recommendations called for giving direct-service industry customers high priority access to non-firm or interruptible power if the companies had been a "responsible customer of Bonneville." John Hines, one of Montana's two representatives on the council, said CFAC "clearly falls into the good citizens category, but realistically, they will not receive the full amount of power they've received in the past and will need to augment their needs with private power." Hines pointed out the council's position on the BPA's obligation to supply power to the direct-service industries. "While Bonneville may contract to supply power to DSIs, it is not required to do so," the council said in its

recommendations. “However, the decision to not serve some DSI load cannot be taken lightly. Some are still important elements of local economies in the Northwest.”<sup>50</sup>

The council’s recommendations drew comments from Western Montana G&T manager William Drummond, who represented seven rural electrical cooperatives. Drummond said CFAC and other direct-service industries in the Pacific Northwest should not be subsidized by the BPA’s other customers. “We are very concerned about some of the proposals contained in the council’s paper regarding service to the DSIs,” he said. “We are very troubled and completely reject the suggestion that other customers should subsidize any level of DSI service. We fail to understand why the council would even suggest that a DSI is entitled to service at a better wholesale rate than a public utility’s industrial customer.” Drummond also spoke to the issue of power allocation if the BPA limited itself in the future to only selling as much power as the federal dams on the Columbia River and the Hanford nuclear plant could generate. “The BPA is obligated to supply power to municipal utilities and rural cooperatives first,” he said. “That adds up to about 7,000 megawatts, which is pretty darn close to what the BPA has to sell.” Selling power in long-term contracts, such as 20-year contracts with prices adjusted periodically, would help to keep that power in the Pacific Northwest, Hines said. The Flathead Electric Cooperative also weighed in on the issue. “We’re no longer a Pacific Northwest market – we have a West Coast market,” General Manager Ken Sugden said about wholesale prices. He criticized the BPA’s past attempts to find additional power sources – for example, promoting the failed Washington Public Power Supply System that left unfinished nuclear plants behind. “Many customers are not impressed with the BPA’s efforts in resource acquisition,” he said. Because of the complicated issues involved, Sugden said he didn’t expect to see new contracts signed until 2008 to 2009.<sup>51</sup>

## **End of an era**

In May 2004, Terry Morlan, an economist with the Northwest Power Planning Council, told a regional conference that high power prices and low aluminum prices probably spelled the end of the dominance of the Pacific Northwest aluminum industry. “It looks to us that the Pacific Northwest’s era as an aluminum production center for the U.S. and the

world is most likely over," Morlan said. Only two of the region's 10 plants were operating, two were permanently closed and two companies had filed for bankruptcy. At one time, the region's smelters produced 43% of the nation's aluminum while employing 10,000 workers in good-paying jobs, but the aging smelters built in the 1930s, 1940s and 1950s were inefficient and used large amounts of expensive power. Power which sold for about \$5 per megawatt-hour prior to 1980 now sold for about \$35, while the price of a ton of aluminum had dropped by about 1% per year. The situation was exacerbated by reduced access by smelters to cheap BPA power and the expansion of global aluminum capacity. Morlan said the BPA lost about \$600 million in 2001 to 2002 and expected to lose another \$300 million in 2003, so power prices were not likely to come down. Morlan added that DSI Inc., the lobbying organization which represented the regional aluminum industry, no longer had an office.<sup>52</sup>

The BPA conducted an open hearing in Kalispell, Mont. on Sept. 23, 2004, to take public input on new policy directions proposed by the agency. Noting the significant impact of the CFAC aluminum smelter on the local economy, a strong contingent of civic leaders from Columbia Falls and the Flathead Valley joined CFAC management and workers to encourage the BPA to provide the plant with enough federal power to run at 50% capacity. The agency oversold power in 2001, including providing 1,450 megawatts to direct-service industry customers. With the eight of the 10 regional plants no longer operating, new gas-fired turbine generating plants coming on line and more water running in the Columbia River system, the BPA was forecasting a small power surplus. The question was how that surplus power would be allocated. One proposal called for providing 500 megawatts to the region's direct-service industries, which CFAC Power Manager Jim Stromberg said was not enough. He pointed to CFAC's role in providing protection to the overall transmission system and noted that the BPA would have to spend \$100 million in transmission to accomplish the same benefits. William Drummond said Western Montana G&T would support providing the direct-service industries with only 300 megawatts. Steve Knight said CFAC currently employed about 150 workers with one potline operating using 100% BPA-supplied power. Aluminum Workers Trades Council President Terry Smith acknowledged the plant's age - it would celebrate its 50th

anniversary in 2005 – but noted that the plant had “a shot at surviving” if it had enough federal power to run at 50% capacity.<sup>53</sup>

In support of CFAC, Flathead Electric Cooperative Trustee Doug Grob reminded the BPA at the hearing that the federal government built hydroelectric dams when there were few residential and commercial customers to use the new power, but over time the aluminum plants used the power and essentially paid for construction of the dams.<sup>54</sup> Another proposal discussed at the BPA’s hearing called for allowing direct-service industry customers to gradually become customers of local utilities in less than 10-megawatt increments to avoid the New Large Single Load policy. The BPA had recently issued a policy against the idea, but the proposal was still under discussion. Noting that areas existed in the Pacific Northwest where aluminum plants lacked support, Ken Sugden said the Flathead Electric Cooperative would welcome CFAC as a customer because of their political clout in Washington, D.C. He also said he supported CFAC’s request for sufficient federal power to run its plant at 50% capacity. Sugden noted that CFAC was creditworthy and had met all their BPA obligations, and their request was reasonable. The BPA also announced a 7.5% wholesale power rate reduction based on higher stream flows and lower demand for power for the rate reduction.<sup>55</sup> By October 2004, CFAC had been operating one of its five potlines since 2003 with employment hovering at about 150 workers. Aluminum metal prices were a profitable \$1,800 per ton, but the cost of alumina and power remained high. The BPA’s 7.5% wholesale rate decrease had helped, and CFAC officials were negotiating for access to 170 megawatts in federal power – enough to run half the plant.<sup>56</sup>

As CFAC evolved into a swing plant with sometimes only one of the plant’s five potlines running, the company began to give up key infrastructure needed for operating at full capacity. One important component was the alumina offloading facility in Everett, Wash. Faced with a June 30, 2004, deadline to decide if it wanted to terminate its lease with the Port of Everett for the unloading facility or renew it for another five years, CFAC chose instead to get a temporary lease until Dec. 31, 2004, while the company evaluated its financial situation. The Port of Everett approved CFAC’s request in mid-July. The short-term lease would cost \$41,000 per month and was the fourth extension

given the aluminum company since the leasing began in 1968. The Port director said short-term leases were a sign of tenuous times in the aluminum industry, and the Port commissioners were concerned about CFAC's misfortune impacting the Port's finances. CFAC was the only company that leased the large storage dome at the port. At one time, CFAC imported 325,000 tons of alumina per year, but shipments had dropped from 318,719 tons in 2000 to 40,093 tons in 2001. The dome and related equipment were jointly financed by the Anaconda Aluminum Co. and the Port of Everett with bonds that had been retired. A dome shape was chosen because it was better suited to holding alumina. According to the Port of Everett's legal counsel, the terms of the lease indicated that the Port would be responsible for demolition of the dome if CFAC gave up the lease. The Port's executive director didn't think there would be significant environmental impacts from demolition.<sup>57</sup> By 2007, the Port of Everett had converted the dome to bulk cement storage. The Port, which owned the dome and the unloading equipment, had signed a long-term lease with Lehigh Cement for use of the facility.<sup>58</sup>

CFAC's weakening position as a swing plant also affected labor contract negotiations. Gone were the days of operating at 100% capacity with high metal prices and profit-sharing. With their labor contract scheduled to expire on Nov. 19, 2004, and the plant operating with only one potline, union officials didn't have much bargaining strength.<sup>59</sup> On Oct. 18, CFAC Human Resources Manager Lyle Phillips announced that union members had approved a new four-year labor contract with a 72-21 vote. The new contract provided for increased contributions by CFAC to the employees' health insurance program beginning Jan. 1, 2005. If a second potline started up in 2005, the workers would also see a 60-cent per hour wage hike, as well as higher pension benefits and improvements to the workers' 401(k) plan. "This contract is a good deal, considering the survival mode that we are in at the plant. It's definitely a bridge to the plant's future," Terry Smith said. Phillips agreed with Smith that the contract's terms were "both fair and generous" and noted that the ratification vote "exemplifies the excellent and cooperative relationship with our employees as our company looks forward to returning to full productivity."<sup>60</sup>

By late November 2004, plant workers and laid-off employees speculated freely about the likelihood of CFAC restarting pots in the next few months. The weak U.S. dollar was making U.S.-produced aluminum competitive on the global market and driving interest in restarting Pacific Northwest potlines. One local rumor had millwrights being hired back at CFAC and workers refurbishing reduction pots in Potrooms 7 and 8 to get ready to fire up Potline 4. Former potline foreman Joe Smith said he was excited and optimistic about a possible restart of Potline 4. He and his family had bought Sunrise Bakery in Columbia Falls, which the rest of the family would operate if he returned to the aluminum plant. Four general mechanics had been rehired in recent weeks. Denny O'Boyle left a job at the Kalispell Regional Medical Center to return to his former job as a crane millwright. Former paste plant employee Dan Owens returned to work as a pipefitter. Monte Mercier returned as an oiler, and Henry Kingsbury left a job with his son in Hawaii to return to his ironworker job.<sup>61</sup>

The BPA, however, had received no word from CFAC about a possible power load increase for a second potline, BPA Spokesman Mike Hansen said. CFAC had a 2002-2006 take-or-pay power supply contract with the BPA for 171 megawatts at \$34.10 per megawatt-hour. With take-or-pay contracts, BPA customers either used all the power they bought or the BPA would sell unused power on the open market and charge the contracted customer the difference between BPA costs to supply the power and what it could sell the power for on the open market. Take-or-pay contracts could be modified by the BPA using cost-recovery adjustment clauses (CRACs), including a once-a-year seasonal CRAC on April 1 each year. Take-or-pay contracts also had an "off-ramp" clause allowing companies a one-time opportunity to reduce their take-or-pay load. Hansen said CFAC reduced its load "about a year ago," but it requested a confidentiality agreement at the same time so there was no information available about how large the reduction was. Meanwhile, Alcoa was using all of its BPA-supplied power at the company's Intalco smelter, Hansen said. If Alcoa's smelter in Wenatchee restarted in December, it would use power from the Chelan Public Utility District's Rocky Reach Dam.<sup>62</sup>

## **Free-marketers return**

The new year brought a surprise from Washington, D.C. that brought back memories of deregulation in California and the resulting West Coast Energy Crisis. Contained within the Bush administration's fiscal year 2006 budget released on Feb. 7, 2005, was a provision requiring the BPA to charge market prices rather than cost-based prices for the power it sold. The provision called for raising rates by about 20% per year, which one Pacific Northwest politician likened to a billion-dollar tax hike. Three other federal power administrations were included in the provision - Georgia-based Southeastern, Oklahoma-based Southwestern and Colorado-based Western. The Bush administration claimed the four regional federal power suppliers were being subsidized by using low-interest loans from the Treasury Department. Pacific Northwest politicians were united in their opposition to the proposal, noting that their residents and businesses were still recovering from the impacts of the West Coast Energy Crisis. They calculated that raising BPA prices to market prices could cost the region about \$480 million the first year and at least \$2.5 billion over three years.<sup>63</sup>

The Bush administration proposal could raise rates from about \$31 per megawatt-hour to as high as \$50, according to some Congressional sources. Montana Republican Sen. Conrad Burns called the proposal "a flat-out bad idea" that would have "a devastating effect on consumers in Montana and the Northwest." Costs were already rising because of drought, he said. "I will not let it stand," Burns said. Montana Republican Rep. Denny Rehberg sent a letter to the Office of Management and Budget criticizing the proposal. Rehberg recalled skyrocketing power prices during the West Coast Energy Crisis. "That experience gave Northwest consumers a taste of market rates and the havoc those rates could wreak on the Northwest economy," he said. "The rate increases persist today, and we do not want our constituents exposed to that kind of devastation again." Rehberg said the Bush proposal could cost the Pacific Northwest economy about \$2.5 billion over the next three years. "It is totally unacceptable to artificially jack up power costs in the Northwest in an effort to reduce the trillion dollar-plus federal deficit," he said. "Power costs in the Northwest did

not cause the deficit and should not be used to bail the federal government out.”<sup>64</sup>

CFAC General Manager Steve Knight noted that if the Bush administration proposal had been enacted a few years earlier, CFAC might no longer be in business. “The BPA is a quasi-governmental agency and should not be in the business of making a profit,” he said. “This money would be leaving the Northwest, and that would be a huge drain to our local economy. We cannot afford to pay California-based electricity prices. Balancing the budget is a good thing, and it should be done without crippling local economies like ours.” Ken Sugden said the Bush proposal could cost the Flathead Electric Cooperative about \$15 million to \$20 million per year above what it was already paying for power, and the Co-op had hoped to go 100% on BPA power in 2006 to save about \$12 million a year. Sugden recalled a similar proposal made by President Ronald Reagan’s OMB director, David Stockman. “I don’t see how this will benefit consumers,” Sugden said. “Somehow they believe market-based prices will be below cost.” Bruce Measure, the Northwest Power and Conservation Council’s Montana representative, took issue with the Bush administration claim that U.S. taxpayers were subsidizing the BPA. “Pacific Northwest ratepayers have paid for the federal dams over and over again,” he said. “The BPA has always made its Treasury payments.” Measure suggested that the only people who might have known about the proposal ahead of time were “the energy traders who have been pushing this type of thing for a long time but had backed off following the Enron debacle.” Noting the lack of support for the Bush proposal, Measure suggested the proposal was really nothing more than “posturing” by the Bush administration.<sup>65</sup>

In a Feb. 26, 2005, press release, the Northwest Power and Conservation Council compared potential impacts from the Bush administration plan to impacts from the West Coast Energy Crisis. BPA rates could increase by 65%, translating into an average household increase of 39% for residents using BPA power or 13% for those using investor-owned utilities, altogether costing the region’s ratepayers about \$1.3 billion, the council said. “The impacts would be similar to those of the West Coast Energy Crisis of 2000 and 2001, and those rate increases bludgeoned the Northwest economy,” Council

Chairwoman Melinda Eden said. "Our regional demand for electricity today is about the same as it was in 1989, reflecting lower use that was expected after 2001. Our economy simply has not rebounded, and to impose a rate increase that amounts to a penalty on Northwest ratepayers would be ill-advised and unfair." The council's analysis showed a \$300 million drop in tax revenue paid to state and federal governments, and a loss of about 13,000 jobs region-wide. The press release also cited Energy Secretary Samuel Bodman as saying the extra revenue the BPA would receive from selling power at market rates would help balance the federal budget. <sup>66</sup>

The BPA defended itself against the Bush administration plan by citing a study that concluded that the 29 federal dams in the BPA system compared favorably in operation to other dams across North America. The study conducted by HJA Consulting of Atlanta compared the 12 U.S. Army Corps of Engineers dams, four U.S. Bureau of Reclamation dams, three Chelan County PUD dams, three Tacoma Power dams, five Seattle City Light dams and two Grant County PUD dams with dams of similar size across North America. "The majority of the Northwest hydro stations bench-marked in this study had similar costs within their relevant peer groups and compared favorably to North American averages for operations and for maintenance of plant, waterways and dams, and buildings and grounds," the study stated. The report noted that the dams could improve operation through more automation. Nearly half the bench-marked costs were related to public affairs and regulatory costs, including fish and wildlife, recreation, taxes and licensing. <sup>67</sup> BPA Administrator Stephen Wright reiterated these points on March 17, 2012, during the Flathead Electric Cooperative's 75th anniversary membership meeting. "The federal hydro system is the envy of the rest of the world," Wright said. "I'm worried we're starting to take advantage of it. It's owned by you, it's part of your legacy, and it's up to us to maintain it." Power by that time was produced in the system at \$10 per megawatt-hour, about one-fifth of what other energy sources cost. Wright noted that Amazon, BMW, Google and other companies moved to the Pacific Northwest because of the region's low-cost power. <sup>68</sup>

## Virtual power

The evolution of aluminum and power markets drew the attention of economists and business analysts. The aluminum industry worked by essentially selling commodities, according to a March 2005 document that Golden Northwest Aluminum sent to the BPA in an argument for a better power contract. Smelters didn't compete directly against each other because they didn't set aluminum metal prices. Instead, all smelters sold primary aluminum into the same commodity market, where the price was set by the London Metal Exchange. Smelters competed instead by trying to keep their costs as low as possible. The cost of production was set by the costs of raw materials, electrical power and operating efficiencies. Primary aluminum's price after delivery was about 2 to 6 cents per pound higher than the London Metal Exchange's price because of transportation and financial factors, the 2005 document explained. <sup>69</sup>

Alloyed aluminum also commanded a premium above the London Metal Exchange's price, Golden Northwest argued. The raw materials – alumina, carbon and electrolytes for the bath – were also commodities. The amount of alumina it took to make aluminum in a smelter was fixed by the laws of chemistry and physics, so as alumina prices changed worldwide, so did the cost of smelted aluminum. Smelters therefore competed on the basis of electrical power and conversion costs. The average price for power worldwide was about \$20 per megawatt-hour in 2005. Historically, the price of alumina was set by the ton or as a percentage of the London Metal Exchange's price for smelted aluminum, varying from 12% to 13%. But it typically took about 1.94 tons of alumina to make a ton of aluminum, and the cost of alumina typically represented about 15% of the London Metal Exchange's price for aluminum. But with alumina prices doubling or tripling in 2005, the cost had increased to about 50% to 60% of the London Metal Exchange's price for aluminum. <sup>70</sup>

Primary aluminum production in the U.S. declined steadily from January 2003 through October 2004, according to production statistics for Alcoa, Alcan, Century Aluminum, CFAC, Noranda and Ormet reported by the Aluminum Association. The annual rate of production for the month of October 2004 was nearly 2.5 million tons, a 5.5% decrease from the annual rate of more than 2.6 million tons in October

2003. The year-to-date annual rate in October 2004 was more than 2.5 million tons, about 7.5% less than the 2003 annual rate of more than 2.7 million tons.<sup>71</sup> The Pacific Northwest aluminum industry was no longer a major contributor to these figures, but a major announcement by the BPA on June 30, 2005, was intended to change that. In its record of decision for the contract years 2007-2011, the agency offered up to 577 megawatts to three Pacific Northwest aluminum smelters and one paper mill for five years beginning in fall 2006. Alcoa was offered up to 320 megawatts, CFAC was offered up to 140, Golden Northwest was offered up to 100, and Port Townsend Paper Co. was offered the remaining 17 megawatts.<sup>72</sup>

The direct-service industries would not receive physical power from the BPA – they would have to purchase the actual electricity on the open market. Instead, the direct-service industries would receive payments from the BPA using a formula based on the difference between market power and the BPA’s rate for preference power. The BPA placed three limitations on the aluminum plant contracts – the payment plan would apply only to 560 megawatts of capacity in a year, the price differential was capped at \$24 per megawatt-hour, and the total benefits for all three aluminum companies were capped at \$59 million per year. The BPA acknowledged in its record of decision that preference customers would end up paying for the DSI subsidy. The BPA also held the option of supplying actual power rather than money in the last two of the five years.<sup>73</sup>

The BPA’s record of decision offered to provide up to \$59 million per year to bring down the cost of power to these plants. According to the plan, the aluminum companies could not pay less than BPA’s preference rate for the power, and credit provisions would protect the BPA and ratepayers in case the companies were unable to pay their power bills. The cost of the assistance to ratepayers was about \$1 per megawatt-hour in higher rates if the aluminum companies took the entire 560 megawatts. “This was a very difficult decision,” BPA Administrator Steven Wright said. “There is not enough low-cost federal system power to satisfy all interests, and we have worked hard to appropriately balance regional interests.” Wright said the BPA needed to balance the interests of industries that provided good jobs with the interests of ratepayers. The BPA noted in its press release that

the “decision continues a trend of BPA ramping down service to DSIs. Service to DSIs has been declining since the pre-1995 period, when contracts totaled over 3,000 average megawatts. In 1995, contracts were reduced to 2,000 average megawatts, and in 2002 contracts were reduced to 1,500 average megawatts.” The BPA also noted that “the companies have no statutory right to power going forward. But they also have contributed to the regional economy and have been long-standing BPA customers.” Contract negotiations would continue between the BPA and the companies, the agency noted. <sup>74</sup>

The BPA’s June 30, 2005 record of decision was based on an initial regional dialogue that began in July 2004 and a second regional dialogue that followed Wright’s Feb. 4, 2005 record of decision on the “Policy for Power Supply Role for Fiscal Years 2007-2011.” While power delivered to regional aluminum smelters had declined from 2002 to 2005, service to public utilities had grown significantly, Wright said in announcing the June decision. The issue at hand was whether to continue to ramp down service to direct-service industries after their contracts expired on Sept. 30, 2006, or to eliminate service to them altogether. The BPA initially decided to offer 500 megawatts to the Pacific Northwest DSIs, including the aluminum smelters at Columbia Falls, Intalco, The Dalles, Goldendale and Vancouver and the Port Townsend Paper Co. mill. The BPA also initially decided to offer the direct-service industries money instead of actual power in order to eliminate market and default risks associated with physical take-or-pay power contracts, and because the actual price for industrial firm power for that time period had not yet been determined and might not be low enough to support the direct-service industries. The BPA also initially decided to base the eligibility of each DSI for benefits on its creditworthiness – Golden Northwest, for example, had gone bankrupt and not paid its BPA power bills – and on each DSI’s ability to operate their plants and create jobs during a tough economic period when power prices were high and aluminum prices were low. The BPA had initially indicated the cost of any service to the direct-service industries should be capped at \$40 million a year. <sup>75</sup>

During the first “regional dialogue,” Alcoa had called the region-wide 500 megawatt figure “arbitrary” and asked for 438 megawatts for its smelters alone. CFAC asked for 170 megawatts, enough for about half

its total capacity; Evergreen asked for 120 megawatts, enough for about half its total capacity; and Golden Northwest asked for 100 megawatts for each smelter in the Pacific Northwest, or 200 for its smelters at The Dalles and Goldendale. The total request came to 950 megawatts. Following the BPA's February policy decision, the DSI companies, their employees, members of the communities where DSI facilities were located and elected officials from those communities continued to argue for benefits equal to or greater than the BPA's initial proposal. Alcoa noted that the \$40 million cap would not be enough to help the direct-service industries buy down the cost of open-market power to where the smelters could operate efficiently. In a different approach, CFAC proposed a two-part deal totaling 517 megawatts, with the BPA providing 323 megawatts of physical power to direct-service industries that had current contracts, at no more than 100 megawatts per customer. CFAC proposed that the remaining 194 megawatts be monetized and split equally between CFAC, Alcoa and Golden Northwest to cover the difference between open-market power and contract prices up to \$10 per megawatt. CFAC's parent company, Glencore, noted that the BPA's proposal of a \$40 million cap "will fail to maintain jobs in the Northwest," given the likelihood that market prices might increase during the 2007-2011 period. If the BPA adopted a financial transaction capped at \$40 million, Glencore foresaw a "strong likelihood that we will be given no other choice but to shut down" the CFAC smelter. <sup>76</sup>

Several energy watchdog organizations and electrical cooperative groups had supported the \$40 million cap, noting that whatever happened, rates to utilities should not go up because of the direct-service industries. The BPA said in its June 2005 record of decision that it was trying to craft a compromise with small impacts on preference customers while still helping the direct-service industries, but "it is not BPA's goal, nor is it within BPA's ability, to guarantee any particular level of DSI operations, even minimal levels. World aluminum prices, raw materials costs, and the financial health of the companies are beyond BPA's control and play at least as large a role in the feasibility of smelter operations as power prices. Many comments, both at the DSI forum and written comments, recognized this fact." The BPA noted that only 300 megawatts of the 1,500 megawatts contracted to the direct-service industries was being used by the DSIs at the time of the

June record of decision, “highlighting the fact that BPA’s power service decisions are only one variable in the economic and operating decisions the DSIs face.” The BPA said it was not willing to offer the service benefits to the direct-service industries without a cap because it would “violate the principle already adopted by BPA that the cost of DSI service must be known and capped.” BPA recognized in the June record of decision, however, that open-market power prices had already increased since the “regional dialogue” began in July 2004, so it was willing to increase the total benefits package for aluminum smelters to 560 megawatts and \$59 million per year. <sup>77</sup>

Regarding the eligibility of direct-service industries to receive benefits, the BPA noted that public comments since July 2004 overwhelmingly called for creditworthiness – with the exception of Golden Northwest. While Golden Northwest had filed for bankruptcy in December 2003 and was unable to purchase the 235 megawatts offered by the BPA, Golden Northwest pointed out that the BPA actually made more money re-marketing that power and so was not harmed by Golden Northwest. The BPA had called for creditworthiness and that BPA-supplied power to direct-service industries be used to support production operations and jobs in its February policy decision. The BPA also had said “it wanted to understand the business plan of each company, and how the business plan explains the ability of the DSI to operate under the market conditions that existed over the current rate period.” Golden Northwest strongly disagreed with the February decision, saying it appeared to favor some companies over others. Golden Northwest said it had emerged from bankruptcy, shed most of its debt and had a “strong, very creditworthy” majority ownership. In its June record of decision, the BPA decided it would split the 560 megawatts between the direct-service industries, “but the creditworthiness of each DSI, on a going-forward basis, will determine whether BPA executes a contract with a company.” Golden Northwest could get benefits even though it had declared bankruptcy and BPA was one of its creditors, but Golden Northwest would only get a small amount of money for its take-or-pay contracted power. “Although receiving so little value is frustrating, a decision to deny Golden Northwest an offer of service benefits in the next rate period solely because it filed for bankruptcy protection and failed to pay BPA in full raises difficult questions regarding the policy of the bankruptcy code to afford debtors a fresh start,” the BPA said. <sup>78</sup>

To decide how much power each DSI would receive, the BPA looked at how much power the direct-service industries were actually using at the time of the June decision – 70 megawatts at CFAC, 177 megawatts at Alcoa, none at Golden Northwest since it shut down in April 2003, and none at Evergreen since it completely shut down in December 2000. The BPA decided to provide 140 megawatts to CFAC, 320 megawatts to Alcoa, 100 megawatts to Golden Northwest, and none to Evergreen. There would also be a “use it or lose it” provision – if a DSI didn’t take the power and use it, that share of the power could be permanently re-allocated to another DSI, but no DSI could get more power than in its current BPA contract – Alcoa’s maximum would be 438 megawatts, CFAC’s would be 171, and Golden Northwest’s would be 236. The BPA said it “will not ask its public preference customers to help underwrite the operating level of any DSI beyond existing contract levels.” The BPA also had to decide whether to provide physical power or monetize the power and provide DSIs with the difference between higher open-market prices and the BPA’s lower-cost industrial firm power. Discussion on this led to the idea of making direct-service industries a customer of local utilities or electrical cooperatives, so decision-making could be made at the local level instead of the regional level. Flathead Electric Cooperative said it would be willing to serve former DSI loads. The BPA wanted to monetize the benefit because it wasn’t sure what the industrial firm power rate was going to be once the 2007-2011 rate period began. One public comment to the BPA called the monetizing proposal “a sham transaction.”<sup>79</sup>

In the end, the BPA decided to stick to a principle the agency had adopted in July 2004 “that any service benefits provided to the DSIs in the next rate period must be at a known and capped cost.” The BPA was concerned that if it provided physical power, a direct-service industry customer might default on its payments. However, the direct-service industries expressed a preference for physical power over money. Recognizing this last point, the BPA decided to make money the default delivery mechanism but “retain an option to provide physically delivered power in-lieu of monetizing the transaction.” Payment would be made to a DSI only if it operated its smelter. The exact details would be worked out later. The BPA would use “firmed secondary surplus as the supply source” and set the price at \$12 per megawatt-hour below the projected market price – that would

determine the financial benefit for actual power used by the DSIs. Three-party contracts would be set up between each DSI, the BPA and the local utility, and the BPA would not provide any credit support to the DSIs.<sup>80</sup>

## **Subsidy calculations**

By the time of the June 2005 record of decision, CFAC had been running one of its five potlines for the past two years and employed about 150 workers with a payroll of about \$7.5 million per year.<sup>81</sup> CFAC officials said it was too early to say if the plant would take the BPA offer and increase production. Spokesman Haley Beaudry noted that the “supply isn’t guaranteed” and “the price is still nebulous” – the BPA did not specify a price, and CFAC needed power to be under \$30 per megawatt-hour to operate profitably. Beaudry noted that metal prices had been good for several months, but raw material and power prices continued to be high.<sup>82</sup> He also noted that a key word in the record of decision was “could” because the BPA was not obligated to supply any power at all to the plant. The BPA’s offer also contained an escape clause: “A decision to reduce the amount of service benefits BPA will provide to aluminum companies, up to and including a decision not to serve any aluminum smelter load, is possible,” the record of decision stated. That kind of language caught CFAC by surprise because earlier agreements did not contain that kind of language, Beaudry said. CFAC was currently using about 70 megawatts, but with power selling at about \$57 per megawatt-hour, the company had no plans to start another potline. Beaudry said that local support had swayed the BPA into making the offer, including local chambers of commerce, Jobs Now, the Flathead Electric Cooperative and Rep. Rehberg.<sup>83</sup>

The \$57 million subsidy to the Pacific Northwest aluminum industry amounted to about \$11.27 per megawatt-hour, but the open-market price for power in June 2005 was about \$50 per megawatt-hour, with prices forecast at around \$57 by 2006, Beaudry noted. Even with the subsidy, CFAC would be looking at \$40 per megawatt-hour when it needed power under \$30. “We can’t operate at that price,” Beaudry said. “Not even close.” BPA Spokesman Mike Hansen suggested an alternative – CFAC could take the entire BPA price benefit but only buy half its allotted power – 70 megawatts instead of 140, and run one

potline instead of two – which would bring the price down by \$23.60 per megawatt-hour and closer to the \$30 threshold. “That’s the real option we’re looking at,” Beaudry said. But the BPA offer specified that aluminum companies could not buy down open-market power below the BPA preference price of \$30 per megawatt-hour. Furthermore, if CFAC did not take its share of the benefits, the benefits could go to another DSI the following year, and a DSI couldn’t get more than \$24 per megawatt-hour in benefits. “At the best, we could keep the one potline up and running,” Beaudry said. He described the situation as challenging. “I think it’s the very best they could do, but the possibility that we might have to close, that possibility exists all the time,” he said. “That never goes away.”<sup>84</sup> Six months later, the BPA announced it had operated in the black for a third year in a row as it continued to control costs and benefit from strong sales in the surplus energy market. In its Dec. 20, 2005 announcement, the BPA said its 2005 annual report showed more than \$126 million in modified net revenues – the highest figure since the West Coast Energy Crisis.<sup>85</sup>

On Aug. 14, 2005, on the eve of the Columbia Falls aluminum plant’s 50th anniversary, Steve Knight talked about CFAC’s continuing power negotiations with the BPA. CFAC traditionally signed five-year power contracts, and the current contract would expire on Sept. 30, 2006. “If you get inside (BPA’s most recent decision), we believe what they’re going to do is offer financial assistance such that we go buy power on the open market and they’ll then buy down the price of that,” he said. “But they’ll buy down only so far – only to the rate they’re selling to utilities – so it really depends on what their rate turns out to be and what the market price is.” Knight said CFAC would purchase power directly from the BPA for the next 12 months, but just enough to run one potline. Open-market power was too expensive, he said. With 150 employees at the plant, CFAC was ranked 15th among Flathead County businesses, tied with the new Target store in Kalispell. The aluminum smelter once employed 1,200 workers.<sup>86</sup> The Daily Inter Lake praised the company on its anniversary in an editorial. “It’s a testament to workers and management that CFAC is still alive when almost all the rest of the Northwest aluminum plants have closed their doors for good,” the newspaper said. “And the plant contributed a lot more than just payrolls. Year after year, the plant gave back to the community for

everything from baseball team sponsorships to equipment for town projects to donations to a host of charitable causes.”<sup>87</sup>

On Nov. 8, 2005, the BPA announced its hope to set the minimum wholesale power price for utility customers at about \$30 per megawatt-hour – about one dollar above current rates and just below the \$32 high several months earlier. BPA rates in 2000, before the West Coast Energy Crisis, were about \$23. For CFAC, the proposed minimum didn’t affect their power costs because, like other direct-service industry customers, they had to purchase their power on the open market. Open-market power was selling for about \$70 per megawatt-hour, which would be reduced to \$46 with the BPA’s \$24 per megawatt-hour subsidy. Meanwhile, aluminum metal prices had increased to about 80 cents per pound, but alumina prices also remained high. When asked if CFAC was making a profit, Haley Beaudry replied, “Well, you try to profit, of course, but it’s no big secret that the aluminum company is not profitable now, not today.”<sup>88</sup>

Five CFAC employees joined a dozen other people at the BPA’s Nov. 30, 2005 public hearing in Kalispell to take input on proposed rates that would go into effect on Oct. 1, 2006. The employees called on the BPA to keep the smelter’s rates low, saying that could be the difference between staying open and shutting down. “Over the last five years, we’ve worked to make CFAC the most efficient plant of its kind in the world,” union leader Terry Smith said. “But power costs are out of our control.” The BPA had cut back power to the Pacific Northwest aluminum industry by one third in 1995. That allocation was cut in half in 2001 to about 1,500 megawatts. Only three of the region’s 10 smelters were still in operation. “We’re struggling,” CFAC Power Manager Jim Stromberg said. “We offer 150 of the best-paying jobs in the Flathead. We’d like to continue providing these jobs – and increase production – but our ability to do that is threatened by high power costs.” If the BPA rates go too high, Stromberg said, “We’d be faced with closing our doors.” While the BPA was offering power to utilities at about \$30 per megawatt-hour, the agency offered a different structure to the direct-service industries – a limited subsidy that would help buy down the cost of open-market power. CFAC’s subsidy would be capped at \$14.7 million per year, at \$24 per megawatt-hour for 70 megawatts of power or \$12 per megawatt-hour for up to 140 megawatts.<sup>89</sup>

The Daily Inter Lake commented on the BPA's power offer to the direct-service industries in a Dec. 8, 2005 editorial. "It's now or never for the Columbia Falls aluminum plant," the editorial stated. The newspaper noted that "due to woeful lack of foresight," the aluminum industry had brought the situation on itself by lobbying for deregulation of power. Aluminum production nationwide had declined by 31% since then. Citing the high-paying jobs that CFAC provided in the Flathead Valley, the editorial called for special consideration. "It would be nice if the country could somehow make policy that would benefit wage-earners, businesses and our economy as a whole instead of thinking only about market-based equations," the editorial said. "Market-based thinking has sent most of our manufacturing jobs to China, Japan and the Third World." The newspaper suggested instead of looking for a quick buck, Americans should be looking at a long-term strategy. "Aluminum is absolutely essential in the production of many modern necessities, including airplanes and automobiles," the editorial said.<sup>90</sup>

In mid-February 2006, the BPA announced it was close to finalizing its plan to allocate 577 megawatts to four DSI customers over a three-year period with \$59 million for use in purchasing market-based power. The plan, which would run from 2007 through 2009, would be finalized in July 2006, according to BPA Spokesman Ed Mosey.<sup>91</sup> A few days later, Haley Beaudry said the proposal needed to be "tweaked." CFAC would see \$14.7 million of the subsidy money, but the BPA offer might only bring the cost of power down to \$46 per megawatt-hour for two potlines, or \$34 per megawatt-hour for one potline, Beaudry said. CFAC repeatedly had said its smelter could not run profitably unless power was brought down to \$30 per megawatt hour. Beaudry said CFAC wanted a bookkeeping change in which CFAC could use more of its share of the BPA subsidy in the first of the three years and less in the following two years, with the hope that energy prices would come down more in the last two years. He also said the BPA offer was a "use it or lose it" offer, so if CFAC turned it down now, the money could go elsewhere to help fund other aluminum plants in other states. CFAC was looking for power in the open market with BPA assistance, but while aluminum metal prices had climbed to \$1.20 per pound, raw material and energy prices still remained high. Marilyn Showalter, executive director of the Public Power Council, opposed CFAC's request, noting that if BPA "front loaded" the subsidy money,

aluminum plants could later ask for more money if rates continued to be high or simply default on the agreement, leaving other customers to pay the bill. The cost of the subsidy program to the average residential customer using BPA-supplied power would be about 74 cents per month. Showalter also noted that saving jobs at CFAC could create a hardship on other aluminum plant employees.<sup>92</sup>

Sen. Baucus met with BPA Administrator Steven Wright in Washington, D.C. on May 16, 2006, and urged the agency to provide CFAC with low-cost power for another five years beyond the Sept. 30 expiration date for the plant's current contract. "CFAC is a major employer in the Flathead," Baucus said. "And those are good, high-paying jobs. We need to make sure BPA gives CFAC a solid deal that will keep its doors open for years to come." Baucus said he'd been working on a deal for months and said he'd keep trying until a deal was signed. "We need to lock in a deal that provides reliable, affordable power for CFAC, and I think we're almost there," he said.<sup>93</sup>

The BPA announced its final decision on June 1, 2006. The agency would sell up to 560 megawatts of power to the three Pacific Northwest aluminum companies for the next five years beginning Oct. 1, 2006, with subsidies to help the three companies purchase power on the open market. "This decision gives the aluminum companies and their employees a fighting chance to continue operations while not unduly burdening other regional customers," Steven Wright said. The subsidy would be capped at \$59 million and be evaluated each year based on open-market prices. Smelters could arrange long-term power contracts based on their share of the subsidy with a penalty fee. The BPA stipulated that the subsidies reflected the need for the plants to compete in a worldwide market, but the agreement in no way established a statutory right for the BPA to sell the direct-service industries power after 2001. The BPA also stipulated that under no conditions would the aluminum companies be allowed to pay less than the BPA's preferred rate for power over the term of the contract.<sup>94</sup>

Sen. Baucus praised the BPA for its decision, noting that he helped broker the deal over the past two months. "There is still a ways to go, but I'm glad BPA is working together with CFAC to get a new contract on the table," he said. "CFAC is a major employer in the Flathead, and CFAC provides good, high-paying jobs that I'm going to fight for. I'm

committed to working together with BPA to ensure that CFAC gets a good, fair deal that enables it to stay open for many years to come.”<sup>95</sup>

A month after the DSI power offer was finalized, the BPA announced the release of its “Long-Term Regional Dialogue Policy Proposal,” the result of five years of talks with Pacific Northwest energy producers, utilities, consumer groups, consultants and direct-service industries. The report described how the BPA would provide power to the region after 2011, when the latest wholesale power contracts expired. “We’ve seen the consequences of the West Coast Energy Crisis, and we do not want to see it repeated,” Steven Wright said. “If we are going to have an adequate energy supply in the future, we need to be developing the infrastructure now.” The BPA, which sold about half the electric power used in the Pacific Northwest, expected to use power from 31 federal dams in the Columbia Basin and nuclear power from the Hanford plant to supply 7,100 megawatts after 2011. Each of the 130 municipal utilities, cooperatives and public utility districts defined as preference customers under the 1980 Northwest Power Act would have access to this power at the Tier 1 rate under 20-year contracts. Any additional power needs would be sold at a Tier 2 rate.<sup>96</sup>

By not melding all power, the BPA hoped to avoid the problems it encountered during the West Coast Energy Crisis when it had to provide additional power at open-market prices. Additional elements of the proposal included conservation, renewable energy sources and “a range of potential benefits to direct-service industries.” Revenue from the sale of surplus power in excess of \$500 million per year would go to early Treasury Department payments, as dictated by President Bush’s fiscal year 2007 budget. Wright said sufficient power should be available to meet needs in the Pacific Northwest through 2009 even under low-water conditions. The BPA also noted that with the Pacific Northwest-Pacific Southwest Intertie, the West Coast had become a highly integrated power market, with some power crossing the Continental Divide. “Meeting future demand depends on adequate infrastructure – both generators and transmission line,” Wright said.<sup>97</sup>

### **CFAC signs on**

CFAC signed a new five-year power contract with the BPA for 140 megawatts on June 1, 2006. The BPA would not provide physical power

to CFAC and three other direct-service industry customers but would provide a cash subsidy to help CFAC and the direct-service industries purchase power on the open market. With open-market power selling for up to \$58 per megawatt-hour, the subsidy would bring the cost of power down to about \$46 per megawatt-hour, Haley Beaudry said. That was still too high for CFAC to make a profit smelting aluminum, Beaudry said, but “it gives us a fighting chance to continue operating. There’s no guarantee, but at least we have a fighting chance.” Beaudry said CFAC arranged some flexibility in the subsidy so it could carry over to different years as power prices fluctuated. If open-market rates dropped very low, CFAC could hold back from using the subsidy for that year and save the money for a following year. However to do that, CFAC had to first lock in a three-to-five year contract and would have to forfeit 8% of the cash allocation. Beaudry credited Sens. Baucus and Burns and Rep. Rehberg for help in getting the contract with the BPA.

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To implement the deal, CFAC signed a block power sales contract with the BPA and Flathead Electric Cooperative on June 28, 2006. In accordance with the new BPA power contract, the Co-op would be involved with receiving, authorizing and paying financial benefits to CFAC. Key provisions in the contract included price forecasting, minimum and maximum monthly benefits, provisions for power curtailment and uncontrollable events, such as strikes, and benefits to CFAC workers in event of a power interruption. The BPA could also provide surplus firm power to CFAC. The five-year contract would begin when CFAC’s current contract with the BPA ended on Sept. 30, 2006.<sup>99</sup> Looking further to the future, CFAC officials told the BPA during an August 2006 meeting in Missoula that they no longer wanted just BPA subsidies – they wanted to buy BPA power rather than go out on the open market. BPA had not yet made power arrangements beyond 2011, and CFAC was interested in that time frame. Steve Knight called the subsidies a “stop-gap” measure. The BPA had been looking at 20-year contracts. Steelworkers Local 320 President Greg Jones reminded BPA officials that CFAC provided “some of the best-paying jobs in the Flathead Valley” and that CFAC needed “cost-based power to operate.”

<sup>100</sup> In the end, the BPA paid CFAC \$38.6 million in power subsidies from October 2006 to September 2009, when the plant shut down for good.

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Alcoa and Golden Northwest also signed a five-year power contract with the BPA in June 2006. Alcoa's Wenatchee and Intalco plants would share the power subsidy, and the Whatcom County Public Utility District would do the bookkeeping for Alcoa. Intalco was operating at 30% capacity at the time of the signing. Alan Cransberg, Alcoa's president of global manufacturing, said the deal was "a bridge to that time period where we hopefully would be able to purchase power in the same manner as other key industries in the region." Golden Northwest, which had closed its plants in Goldendale and The Dalles during the West Coast Energy Crisis, agreed to take the equivalent of 100 megawatts of power, but owner Brett Wilcox said he intended to wait and see how alumina and power markets changed before making a decision on when to start up again. The Klickitat County Power Utility District would do the bookkeeping for the Golden Northwest contract.<sup>102</sup> In the end, Golden Northwest forfeited its 100-megawatt share for subsidies in the 2007 block power agreement. The 560-megawatt agreement then was split between CFAC at 170 megawatts and Alcoa at 390 megawatts.<sup>103</sup>

Alcoa continued to press its case for access to low-cost BPA power. In a Sept. 8, 2006, PowerPoint presentation for the BPA, Alcoa noted that its Intalco smelter, which historically relied on the BPA for power, was operating at 33% capacity, and its Wenatchee smelter, which historically relied on the BPA for half its power, was operating at 50% capacity. Alcoa emphasized the need for "fairness" by the BPA in order to promote customer support, reduce litigation, increase certainty and long-term stability, and allow for cooperation. Alcoa noted that the 1980 Northwest Power Act gave the BPA authority to serve direct-service industries, required the BPA to purchase power to meet contractual obligations, including DSI loads, and assumed that DSI loads would be served by preference utilities. The 1980 Act was a compromise that worked for preference utilities, investor-owned utilities and direct-service industries, Alcoa said. Now the BPA was proposing to change the balance anticipated under the 1980 act, the company claimed. There was no justification for separating the direct-service industries from other industries and refusing them service on that basis, Alcoa said. "Fairness demands that aluminum plants be treated like other industries," Alcoa said.<sup>104</sup>

A fair level of service meant sufficient power for aluminum plants to operate at high production levels, Alcoa argued. Alcoa alone needed 625 megawatts to operate both of its plants at full capacity, but 560 megawatts was “reasonable,” Alcoa said. The Pacific Northwest aluminum industry once used 3,000 megawatts. Each aluminum company should have access to the entire amount if other companies did not operate, Alcoa argued. If Alcoa took 560 megawatts, that would leave 2,440 megawatts available for other BPA ratepayers. Alcoa said it was willing to pay \$36 to \$52 per megawatt-hour for its Intalco plant, but that was 33% to 92% higher than what the BPA charged utilities. Alcoa claimed studies showed that even if the BPA served all loads, including aluminum plants, it would have a net surplus in most years. In the long-term outlook after 2011, Alcoa expected world aluminum markets to grow. Without access to Tier 1 power under the BPA’s new policy proposal, the Intalco plant would close and the Wenatchee plant would depend entirely on the Chelan County PUD for power. Alcoa noted that Intalco’s 2006-2011 contract was for \$52 per megawatt-hour while the average power cost for aluminum smelters worldwide was \$23 and the BPA cost estimate was \$29. Costs around the world included Russia at \$8.40 per megawatt-hour, Canada at \$13.60, Africa at \$14.30, Latin America at \$16.70, Australia at \$16.80, Eastern Europe at \$19.30, the Middle East at \$20, the U.S. at \$23.20, Asia at \$25.30, Western Europe at \$26.70 and China at \$38.10. <sup>105</sup>

Alcoa pointed out that aluminum companies had provided numerous benefits to the Northwest and the U.S., including timely construction of federal hydroelectric dams and transmission lines, lowering rates for all BPA customers, paying for much of the BPA system through rates, providing metal for national defense, providing economic reserves, and providing needed employment in the Pacific Northwest. Alcoa said it provided 840 direct jobs in the Pacific Northwest, 3,310 indirect jobs, a \$67 million payroll, and the potential to create 6,000 jobs if its two plants ran at full capacity. Maintaining aluminum production in the U.S. would help maintain manufacturing jobs, help balance trade, strengthen the U.S. dollar and reduce U.S. dependence on foreign strategic materials. Alcoa also explained how aluminum production would help reduce greenhouse gas emissions - one pound of lighter-weight aluminum in a motor vehicle could reduce carbon dioxide emissions by 20 pounds over the life of the vehicle. Aluminum

recycling used much less electricity, and about 75% of the 709 million tons of aluminum that had been produced since 1888 was still in use. Aluminum had the potential of being “climate neutral” before 2020, Alcoa said. <sup>106</sup>

## **Glencore and CFAC**

While CFAC and other Pacific Northwest aluminum companies struggled under higher raw material and power prices, CFAC’s parent company sought other opportunities in the global aluminum industry. On Oct. 9, 2006, a three-way merger in Russia between Rusal, Sual and Glencore was announced, creating the world’s largest aluminum producing company. Rusal was the world’s third largest aluminum producer with 75% of Russia’s output and 10% of global output. Sual produced 5.4 million tons of bauxite, 2.2 million tons of alumina and 1 million tons of aluminum in 2005. The merger, which would result in 66% ownership by Rusal, 22% by Sual and 12% by Glencore, was expected to clear anti-trust authorities by April 1, 2007. An initial public offering was expected in 18 months. The merged company was expected to produce 4 million tons of aluminum and 11 million tons of alumina per year, equal to about 12.5% of the world’s aluminum output and 16% of the world’s alumina output. Revenue was estimated at \$10 billion per year. Over the next five years, investments in production were expected to reach \$3 billion to \$3.5 billion. Glencore’s sales revenue was \$91 billion in 2005 with a net profit of \$2.6 billion. The global trading company had assets in aluminum, alumina, zinc, lead, copper, nickel, cobalt, ferroalloy, coal, oil and agricultural commodities. <sup>107</sup>

By August 2007, Glencore International AG was one of the largest commodities suppliers in the world. It had \$4.6 billion in shareholder equity at the end of 2004 and was Europe’s sixth-largest company in terms of turnover in 2006. “Glencore’s history reads like a spy novel,” Stephen Long said in a Feb. 11, 2005 ABC Radio broadcast. By August 2007, Glencore owned 100% of Evergreen Aluminum, an idled plant on the Columbia River in Vancouver, Wash.; 100% of the Columbia Falls Aluminum Co., operating with 145 employees; 23% of Century Aluminum Co., a holding company headquartered in Monterrey, Calif. with interests in aluminum plants across the U.S.; 93% of Windalco, a bauxite operation with 1,200 employees in Jamaica; 92% of Alpart, a

bauxite operation with 1,200 employees in Jamaica; 100% of Prodeco, a coal mine with 256 employees in Colombia; 100% of Carbones de La Jagua (formerly Caribe), a coal mine with 350 employees in Colombia; 97% of Los Quenuales, a lead and zinc mine in Peru with 3,269 employees; 85% of Perubar, a lead and zinc mine in Peru with 444 employees; 100% of Sinchi Wayra, a lead, zinc and tin mine in Bolivia with 3,427 employees; 100% of Aguilar, a zinc, lead and sulfuric acid mine in Argentina with 1,725 employees; 100% of Moreno, a sunflower and meal plant in Argentina with 575 employees; 100% of Portovesme, a zinc and lead mine in Sardinia with 773 employees; 100% of Eurallumina, an alumina refinery in Sardinia with 575 employees; 100% of Kubikenborg Aluminium AB, an aluminum plant in Sweden with 470 employees; 100% of Aughinish Alumina, an alumina refinery in Ireland with 472 employees; 73% of Mopani Copper, a copper mine in Zambia with 8,848 employees; 40% to 49% of OAO Russneft, an oil company in Russia with 10,000 employees; 100% of Rostov on Don, a cereal company in Russia with 470 employees; 99% of Kazzinc, a zinc mine in Kazakhstan with 21,000 employees; 73% of PASAR, a copper mine in the Philippines with 1,047 employees; 70% of Murrin Murrin, a nickel and cobalt mine in Australia with 671 employees; 100% of Cobar, a copper plant in Australia with 267 employees; 14% of Xstrata, a large holding company with mining interests around the world; 50.5% of Minara Resources Ltd., a mining holding company; 33.3% of Cerrejon, a coal mining company in Colombia; and 12% of Rusal, an aluminum conglomerate in Russia, the world's largest with 110,000 employees in 17 countries. <sup>108</sup>

In its struggle to survive, CFAC continued to set aside infrastructure that would be key to long-term expansion. The company began by giving up its lease on its alumina off-loading facility in Everett, Wash. It also had focused on using the three potlines in the Columbia Falls site's East Plant built in the 1960s instead of the two potlines in the West Plant built in the mid-1950s. The East Plant potlines were newer and more efficient. In the eight years after the plant closed in 2001 during the West Coast Energy Crisis, the West Plant took on the appearance of a boneyard, with missing parts and sometimes entire pots missing. All 600 pots in the plant had been stored for a restart when the plant entirely closed in 2001 by leaving a large amount of aluminum in the cathode and then dropping the anode on top of the

aluminum. To remove all that valuable aluminum from the West Plant's pots, CFAC's ironworkers had pulled the anodes and then removed the cathodes from their foundations, flipped the cathodes upside down in the North Crane Bay and dumped the contents. One former CFAC worker characterized the West Plant as a "graveyard" but noted that the West Plant's alumina unloader was still functional. <sup>109</sup>

As manpower and revenue shrank, the company also began to forgo full use of its casting facility. On Sept. 1, 2006, CFAC notified the Montana Department of Environmental Quality that it planned to install and operate a new casting line in the smelter's existing casting house to produce sow ingots. The DEQ determined that the project was a "de minimis" change and did not require an additional air pollution control permit. <sup>110</sup> The AAC plant had produced 50-pound "pigs" for Anaconda's rod and wire plant in Great Falls, Mont., when the smelter first fired up in August 1955. It also had produced 6-foot long 6-inch square wire bars and 150-inch long 36 ½-inch wide sheet ingots. <sup>111</sup> Over the years, the casting facility was improved to produce T-bars and large sheet ingots. Installing a simple sow-casting line was a cost-saving measure that didn't require casting equipment that was costly to maintain and operate. Molten aluminum from tapping operations also could be poured into molds without being stored in holding furnaces, which saved energy.

On Nov. 23, 2006, the Montana Job Service indicated that CFAC was looking for about 100 laborers and 20 to 39 millwrights and electricians. Estimated wages were \$19 per hour for laborers and up to \$23 to \$24 per hour for millwrights and electricians. A job fair took place on Nov. 22 in Kalispell to test applicants. Mike Shoquist, at the Montana Job Service, said the news from CFAC "came out of the blue" and surprised everyone. At the time, there was high demand and low supply for skilled and unskilled labor in the Flathead Valley. Many former CFAC plant workers had moved on to other types of work, but it was thought some might want to return to CFAC for health insurance and other benefits. CFAC had about 150 employees and had been running just one potline since March 2003, but the 140-megawatt power contract the company signed in June 2006 provided enough power to start a second potline. <sup>112</sup> On Nov. 28, CFAC announced job openings for a second potline to start up sometime in early 2007.

Haley Beaudry noted that power prices didn't drive the decision to prepare for a restart – it was higher metal prices and lower alumina prices. Metal prices on the London Metal Exchange had increased from 70 cents a pound a few years earlier to as high as \$1.20 by November. Alumina prices had reached \$600 a ton, but after Australia's capacity increased, global alumina prices were under \$300, Beaudry said. CFAC's alumina would probably come from Jamaica or Asia. The company's new sow-casting technology installed in October also would use less natural gas and increase efficiency, the company said. <sup>113</sup>

By January 2007, CFAC was in the process of hiring about 100 workers, adding about \$4 million in payroll to the local economy. A restart at CFAC could cause a bump in the state's economic statistics – manufacturing accounted for about 22% of Montana's economy, but the number of workers in the sector had dropped from about 27,000 in 1996 to 19,700 in 2007. <sup>114</sup> In February, Steve Knight told the Hungry Horse News that CFAC needed a longer-term power contract with the BPA, one that extended past the current contract's expiration date in 2011, to succeed. The current contract provided subsidies to help CFAC purchase open-market power, and CFAC was looking for alternative power supplies, but “what BPA decides to do is huge,” Knight said. About 150 workers had recently been hired, effectively doubling the company's payroll by adding \$12 million. Knight noted that aluminum prices were good at \$1.22 per pound versus 60 cents a few years ago. <sup>115</sup>

With improving metal, alumina and power prices, CFAC also took a look at improving its tax rates. In December 2006, School District 6 Superintendent Michael Nicosia told his board that CFAC had protested its property taxes and was seeking a four-sevenths reduction in the plant's assessed value from \$69.5 million to \$29.5 million. CFAC had paid the district about \$289,000 per year in elementary school taxes and about \$128,774 for high school taxes. If CFAC was successful, the elementary tax would drop to about \$165,000 and the high school tax would drop to \$73,500, Nicosia said. The Montana Department of Revenue had lowered the valuation of the company's property from about \$80 million to \$69.5 million earlier in 2006. The company then filed a tax protest in the fall, but the Flathead County Tax Appeal Board ruled in favor of the Revenue Department. CFAC next appealed to the

state tax board. Haley Beaudry explained to local media that other Pacific Northwest aluminum smelters were being scrapped because they weren't worth much. Steve Knight said CFAC did not "take it lightly" and claimed the smelter was being taxed higher than comparable operations. CFAC stated in county tax documents that the plant's 807 acres were worth only \$1 and the plant and equipment were worth about \$27 million. The Revenue Department had valued the land at \$2.89 million. The tax appeal likely would not be heard until summer 2007. In the meantime, CFAC paid its November 2006 tax bill and filed a protest, so the difference between what the state and CFAC said was due was put in escrow.<sup>116</sup> In 2007, taxes on the CFAC plant were abated by \$323,580. The company paid \$791,564 to the Flathead County Treasurer's Office.<sup>117</sup>

In climbing out of the energy hole created by the West Coast Energy Crisis, the Columbia Falls Aluminum Co. had gone from being totally shut down in 2001 to operating three potlines before falling back to one potline from 2003 to 2006. While the cyclical aluminum market had rebounded with good metal prices and adequate alumina prices, the Bonneville Power Administration had learned some hard lessons from the past energy crisis that the agency didn't want to repeat. The solution it proposed was to provide a capped sum of money to Pacific Northwest aluminum companies as a subsidy for open-market power rather than promise to deliver physical power. Helping the solution along was the fact that the regional aluminum industry had shrunk from 10 companies to three, including CFAC. Aluminum prices continued strong into 2008 as CFAC increased production to three potlines, but high power prices returned and forced a two-thirds curtailment in May 2008. By the end of the year, CFAC was running only one room, limping along on half a potline. Meanwhile, an appellate court ruled that the BPA's June 2005 power plan for DSIs was improper, eliminating subsidies that were helping CFAC stay operating. Montana's U.S. senators went to bat for CFAC, helping to negotiate new power contracts, but it was too little too late. Glencore declined to support the plant, and it spiraled down to final closure.

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