

Diversified Energy's Questionable Financial Practices Continue in 2022

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Overview

Earlier this year, we published *Diversified Energy: A Business Model Built to Fail Appalachia*, which questioned the company's ability to pay for decommissioning its inventory of over 60,000 wells in Appalachia.¹ Since that time, Diversified Energy ("Diversified"), the nation's largest well owner, has acquired additional wells while reducing the amount it expects to pay to decommission its well inventory. Most recently, the company has projected that its cash flows over the next 50 years can not only retire its well inventory of 72,000, but that it can continue to pay large dividends and eliminate its debt obligations within the next 10 years.²

Well ownership carries the responsibility to retire, or plug and abandon (P&A), these wells. The company must account for these future P&A costs as a liability, called an Asset Retirement Obligation (ARO), in its financial statements. The assumptions that undergird Diversified's AROs do not follow industry norms. Diversified assumes it can P&A its wells at an average cost of \$21,000, a fraction of industry norms, and that its wells, most of which are in Appalachia and are more than 20 years old, will be economically viable through 2095.³ By using such questionable assumptions, Diversified's AROs are far lower—hundreds of millions of dollars lower—than they would be if the company used assumptions in line with the industry.

Even with the low ARO value on its books, Diversified was, by some definitions of insolvency, technically insolvent at the end of June 2022. Its total liabilities (\$4.387 billion) exceeded its total assets (\$4.033 billion). This is noteworthy because Diversified added to its well inventory through acquisitions, yet reduced its AROs by \$60 million, from \$522 million at year-end 2021 to \$462 million mid-2022, primarily by reducing the per-well P&A cost assumptions. As noted in our 2022 report, if Diversified used assumptions based on industry norms, its ARO liabilities would make the company technically insolvent, by some definitions of insolvency.⁴

Using estimates from in-state regulators in Pennsylvania, West Virginia, Ohio, and Kentucky, as well as cost estimates from companies that specialize in P&A, our analysis reveals that Diversified's P&A estimate of \$21,000 per well is well below industry averages.

Diversified's estimates of its own P&A costs are also questionable because they are only a fraction of what the company will charge states when it P&As orphaned wells using federal funds. For example, the company has been awarded a contract to P&A 100 wells in West Virginia, at an average cost per well of \$126,000. Yet it claims in its financial filings that it can P&A its own wells for roughly one sixth the cost it will be paid with federal dollars.

By acquiring three plugging companies in Appalachia in 2022, Diversified not only plans to benefit from the \$4.7 billion in federal funds to clean up orphaned wells but it is also poised to benefit from \$700 million in federal grants from the Inflation Reduction Act (2022) to P&A its low-producing conventional wells and install new equipment designed to reduce methane emissions.

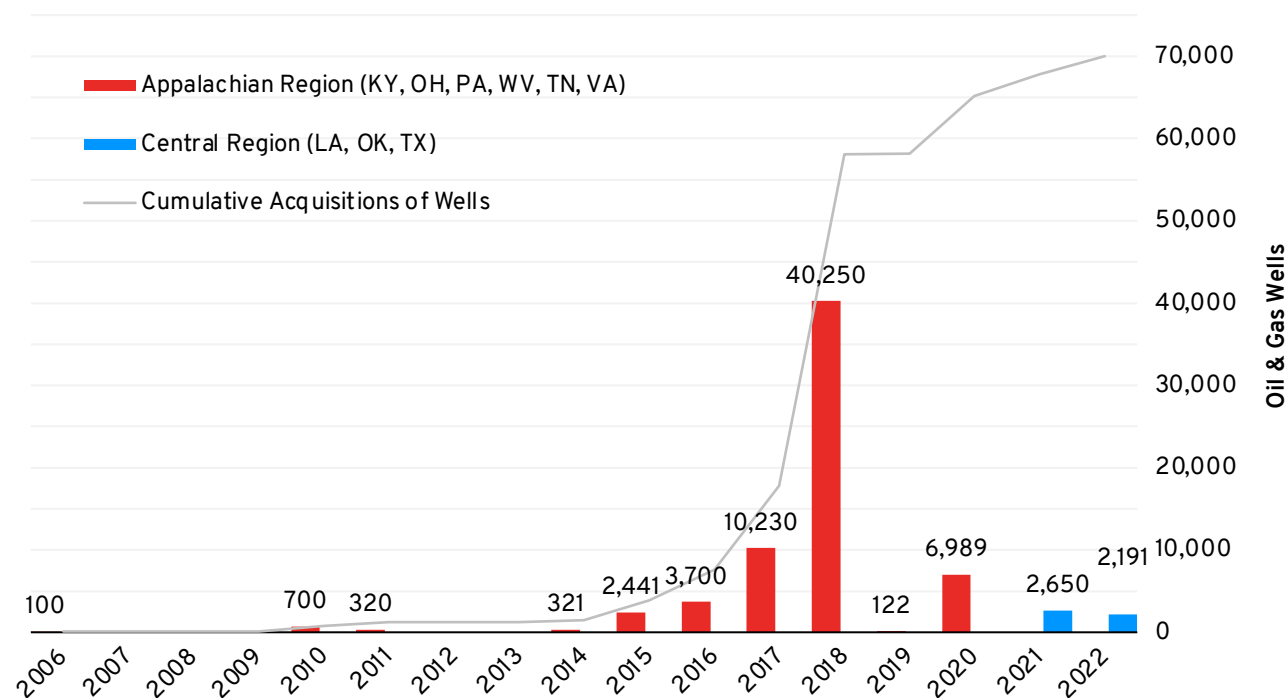
The company has also continued other unusual, often questionable, financial practices throughout 2022. For the ninth consecutive year, the company booked a Gain on Bargain Purchase, which is an uncommon financial practice of recording a financial gain on an acquisition on its income statement. And, at the end of 2021, it carried forward \$183 million in unused marginal tax credits, which are tax credits it generated when natural gas prices were low. These ongoing, highly irregular financial practices question Diversified's ability to retire its own wells and suggest that it may be an inappropriate steward to help solve the country's orphan well crisis.

Acquisition Strategy Key to Growth

Since it went public in 2017, Diversified Energy has fueled its growth through an aggressive acquisition strategy fueled by low-interest debt. The acquisitions have been necessary to generate cash flow, which the company has largely used to pay equity and debt investors.

The cash flow will also be needed to fund its plugging and abandonment (P&A) obligations, or Asset Retirement Obligations (AROs). Cash flow from its existing wells will not be sufficient to fund these AROs, based on recent analysis conducted by the Ohio River Valley Institute (ORVI).⁵ An ongoing, continuous acquisition strategy is necessary to generate current cash flow, which also increases its P&A obligations. The company has been described as a legal Ponzi scheme.

Figure 1: Diversified's Acquisition History, 2006-2022



Source: The Capitol Forum

While an aggressive acquisition strategy, in and of itself, can be financially sound, the assumptions about future cash flows and asset retirement obligations (AROs) are faulty. Both the value of the assets and the corresponding liabilities of the acquisitions are flawed. Independent analysis has found that Diversified's wells are declining at a much higher rate than their internal projections. In its latest financial report (November 2022), Diversified estimates an annual well decline rate of 8.5 percent, while independent analysis has found Diversified's well decline rate to be between 11 percent and 19 percent annually.⁶ Meanwhile, in projecting future cash flows and liabilities over the next 70 years, the company is projecting a long-term decline rate of just 4.5 percent to 5 percent (see later section for more).

According to a September 2022 analysis by *The Capitol Forum*, Diversified may also be overstating the number of its producing wells in Appalachia.⁷ *The Capitol Forum* finds that, between 2018 and 2021, Diversified had inflated its producing well inventory by an average of 13,000 wells per year. This could mean that its "inventory of aged, non-producing wells may be larger than previously realized." *The Capitol Forum* notes that this could impact the company in two ways:

First, as fewer wells contribute to the company's total output, decreasing legacy production levels are more likely to be observed sooner rather than later, reducing cash flow and likely requiring the company to search for another acquisition to boost production.

Second, the more wells that are thought to be active but are in fact nonproducing, the larger the company's retirement obligations are and the sooner the company will need to start spending to plug its inactive wells, adding to Diversified's outsized list of plugging jobs throughout Appalachia.

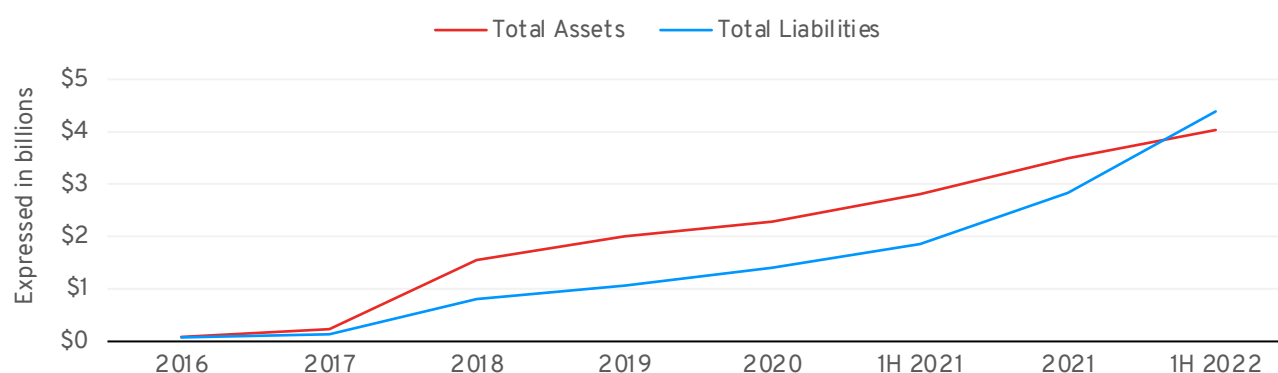
As its nonproducing well inventory may be growing, the company is beginning to offload its wells. For the first time, Diversified offloaded nearly 2,500 oil and gas wells in Ohio in a sale to Energex Power in 2022, according to a recent article in *The Capitol Forum*.⁸ Of the 2,461 wells sold to Energex Power, 1,117 were inactive wells and total production from the wells had declined from 2019 to 2021. According to *The Capitol Forum*, "Diversified's divestiture may signal that these assets didn't have as long of a production timeline as the company initially hoped."

Technical Insolvency, By Some Definitions of Insolvency; Hedging to Blame

As of June 30, 2022, Diversified's total assets were \$4.033 billion, and its total liabilities were \$4.387 billion. Based on its own internal accounting, the company is insolvent, by some definitions of insolvency, as its total liabilities are greater than its total assets. Hedging losses were the primary cause of the company's total liabilities exceeding its total assets at the end of the first half of the year.

Diversified's liabilities exceeded its assets even though the company had reduced its ARO, a liability, from \$522 million at year-end 2021, to \$462 million mid-2022. The ARO was reduced largely because Diversified lowered its estimated P&A cost per well to \$21,000, an amount much lower than industry norms. If Diversified used assumptions based on industry norms (\$50,000 P&A cost), the increase in its ARO liabilities would make the company technically insolvent, by some definitions of insolvency.

Figure 2: Diversified's Total Assets and Liabilities, 2016-1H 2022



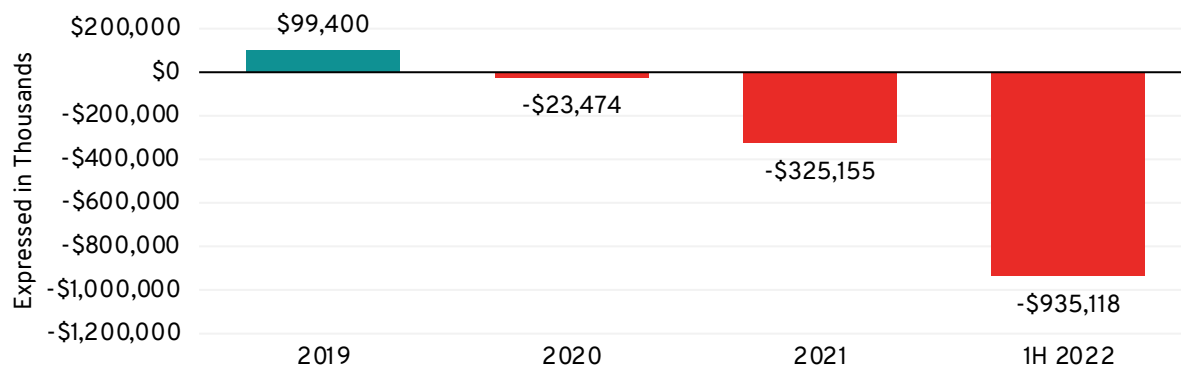
Source: Diversified Energy Annual Reports

Hedging Losses

Diversified, like many oil and gas companies, uses a hedging strategy to protect itself from declining commodity prices, particularly for its most important product: natural gas. Diversified has incurred significant

hedging losses in 2021 and the first half of 2022. These hedging losses have pushed the company to report overall losses each year since 2020, as illustrated in Figure 3.

Figure 3: Diversified's Income (Loss)



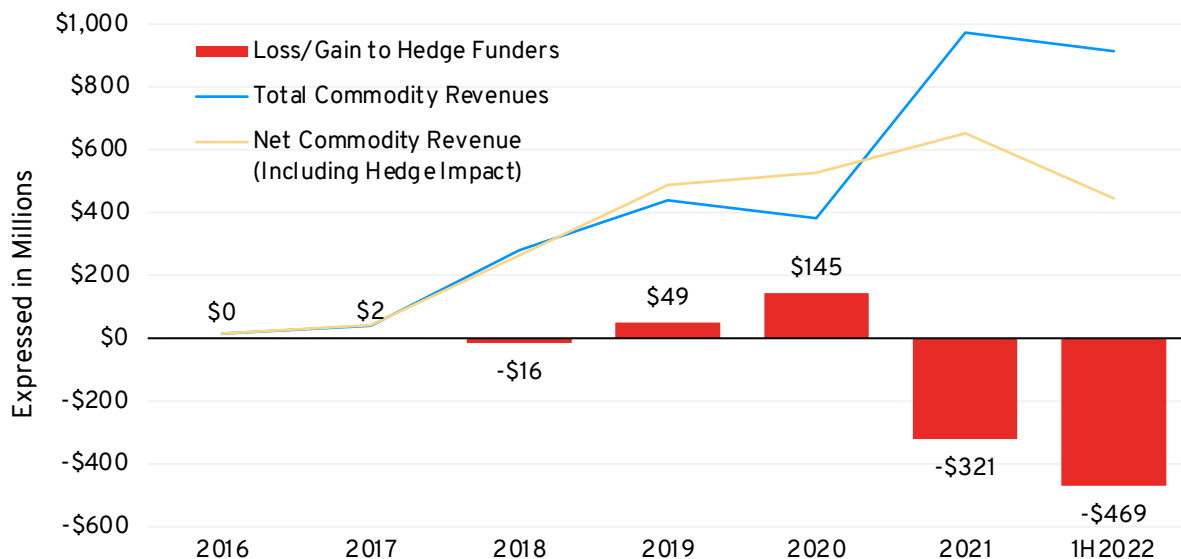
Source: Diversified Energy Annual Reports

In 2021, on revenues of \$1 billion, Diversified recorded a \$325 million loss, based largely on hedging losses.

In the first half of 2022, on revenues of \$934 million, Diversified recorded a \$1.18 billion operating loss, resulting in a \$935 billion net loss, after including a \$295 million income tax benefit. Most of its 1H 2022 operating losses can be blamed on hedging losses, which totaled \$1.67 billion and included losses on derivatives, settled and unsettled.

In 2022, the company noted it is currently hedging 90 percent of its production over the next 12 months. Diversified notes that it prioritizes protecting interest payments to its debt holders and dividend payments to its shareholders. This means it foregoes profits when commodity prices move higher, as they have done in 2021 and 1H 2022. From 2016 to 1H 2022, the company has accrued \$609 million in hedging losses (Figure 4).

Figure 4: Hedging Losses of \$609 Million Since 2016



Source: Diversified Energy Annual Reports

Hedging 101

What exactly is hedging? In its simplest form, hedging is an investment to reduce financial risk. Hedging strategies can be complicated, and some have interesting names like bear puts, naked calls, or short straddles.

Many oil and gas companies use hedging strategies to protect against price drops of their primary end products, namely oil and gas. Used this way, hedging is similar to buying an insurance policy that pays off when prices of oil or gas drop below a pre-set level. One way to do this is to buy a put on the New York Mercantile Exchange (NYMEX), based on the price of natural gas at the Henry Hub. A put allows the investor (the put owner) the right, but not the obligation, to sell a specific amount of natural gas at a set price within a set time period.

For example, in November 2022, natural gas on NYMEX is approximately \$6.00/MMBtu. If a company wanted to protect its future production of natural gas from falling prices over the next four months, it might buy a put to sell 10,000 MMBTUs of its gas at a \$6.00/MMBtu. This would cost the company roughly \$13,000. If gas prices move higher, the company would not use (or exercise) its put option. But if the price of natural gas drops to, say, \$3.00/MMBtu, the company will be able to use its put option to be able to sell its gas at \$6.00/MMBtu—double the price of gas at that time. Or, it can sell its put option—which will have become far more valuable as natural gas prices drop.

Frequently, lenders require borrowers, such as exploration and production (E&P) companies, to hedge oil or gas prices to protect the company's cash flow if prices decline. The lenders want to ensure that the borrower has sufficient cash flow to make its interest payments, even if prices drop. According to a survey, 73 percent of the nation's largest natural gas E&P companies had gas hedges at the end of 2020.⁹

Just like an insurance policy costs money, buying a put costs money. To offset the cost of the put, many oil and gas companies sell a call on the price of oil or gas. A call option gives the owner the right, but not the obligation, to buy a specific amount of, say, natural gas, based on a set price within a set time period.

A collar is the hedging strategy of simultaneously buying a put and selling a call on the same underlying assets or commodities, for example, natural gas. Many companies use collars to offset the cost of protecting their cash flow if prices for their products drop without incurring the expense of only buying a put. When prices for the underlying commodity increases, these companies can deliver their product—but at a below-market price determined by the contract on the call. They can also buy back their call option, though likely for more than they sold it for.

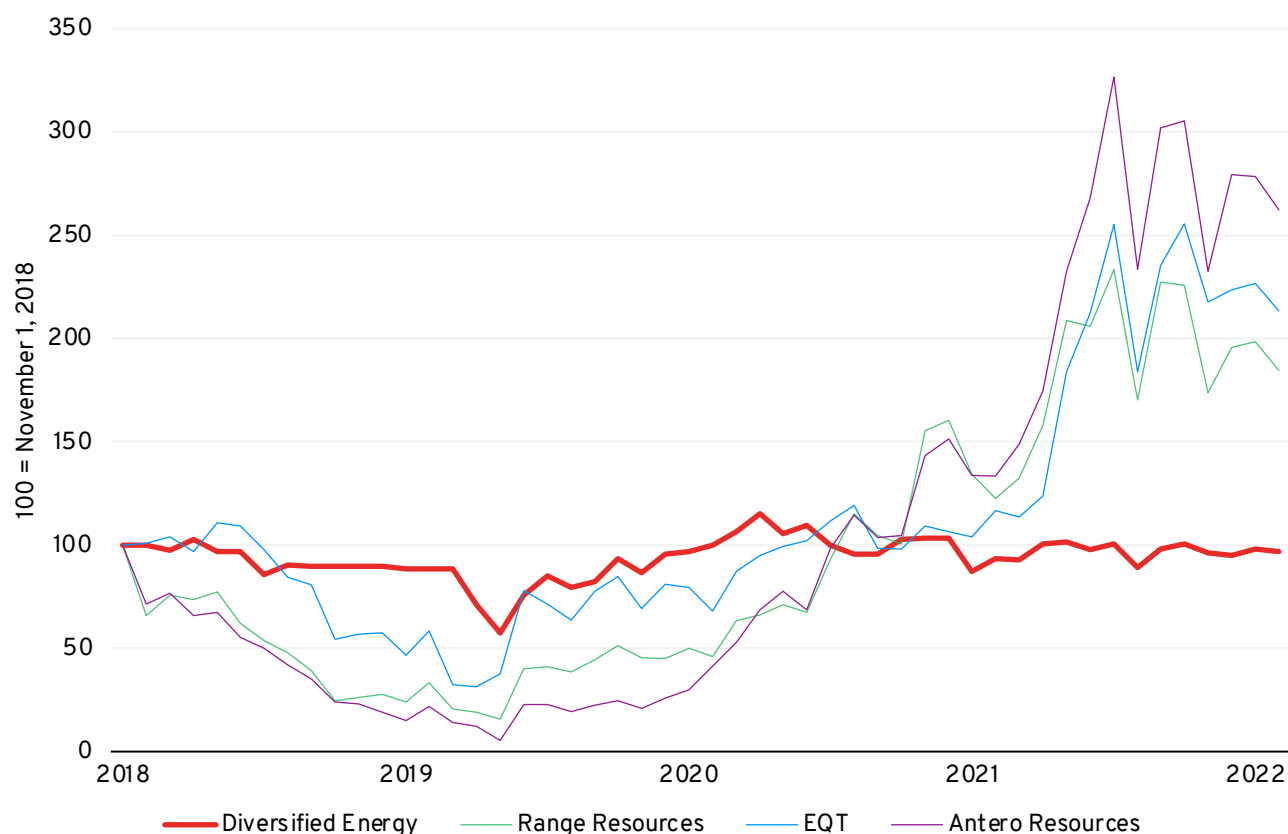
Simply put, collars can limit a company's downside financial risk when prices on underlying commodities (or assets) fall, but they can also limit a company's potential upside when the prices on underlying commodities (or assets) increase.

Companies must recognize the current prices on their hedges in their financial statements. They must put a price on their hedges in a process called mark-to-market. In some cases, a company can have recognized hedging loss after it closes out, or realizes, its hedging position. In other cases, a hedging loss can occur while the hedging position remains in place.

Diversified's Stock Performance Lags Appalachian Peers

A company's stock price reflects investors' perception of its value. Over the past few years, investors haven't been as bullish on Diversified's stock compared to other large natural gas producers in Appalachia. Diversified's stock roughly doubled when it first went public in 2007 and has remained relatively stable over the last four years. In contrast, other Appalachia producers—including EQT Corporation, Range Resources, and Antero Resources—have seen their stocks double over this time. For example, Antero Resources' stock grew from \$13 a share to over \$34 over the last four years.

Figure 5: Diversified's Stock Price Lags Appalachian Peers, November 2018-December 2022



Source: Diversified Energy, Range Resources, EQT, Antero Resources

Gain on Bargain Purchase (GoBP)

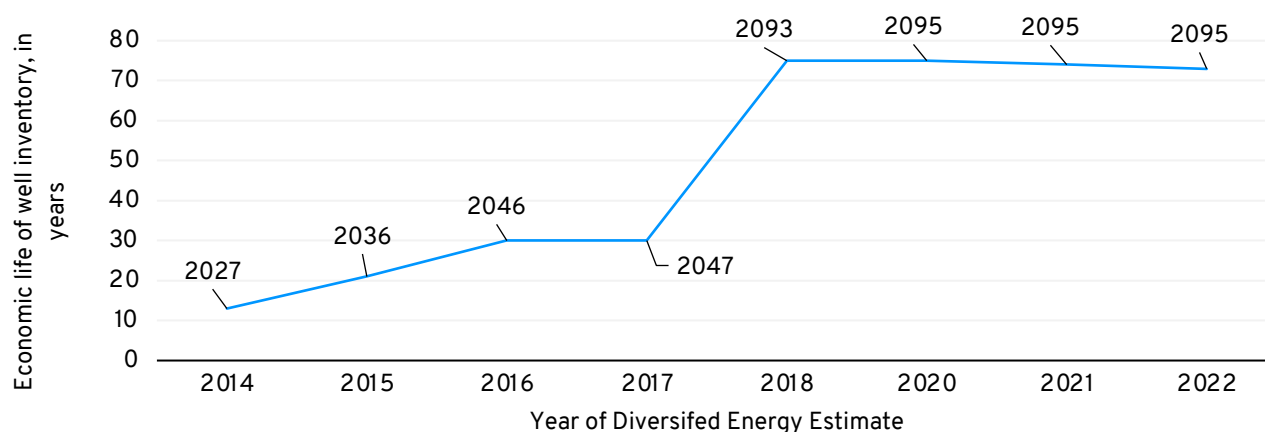
A Gain on Bargain Purchase (GoBP) is a one-time gain for financial purposes recognized on an acquirer's income statement. This "paper" gain is not taxable. According to Hart Energy: "Such non-recurring gains typically come under a great deal of scrutiny, both from financial statement auditors and from regulatory bodies. As an example of the regulatory rigor applied to bargain purchases, one upstream oil and gas company and its auditor recently came under investigation by the Securities and Exchange Commission related to a bargain purchase reported on the company's books because of its acquisition of oil and gas properties."¹⁰

Diversified Energy has booked at least one GoBP annually since 2014. In its latest financial filings, at the end of June 2022, Diversified again reported a GoBP. Why does it matter? GoBPs serve to artificially boost net income, and make the company appear more profitable than it is. It also implies that a company has made an outstanding, financially savvy acquisition. Since Diversified has taken GoBPs on most of its acquisitions and has booked at least one GoBP each year since 2014, this implies that the sellers were either distressed sellers or unaware of the value of their assets. Since the sellers were not distressed sellers and had decades of experience in the industry, it is likely that Diversified made overly robust assumptions to undervalue the liabilities associated with its acquisitions (see AROs) and/or overly robust assumptions about future cash flow that could be generated from these acquisitions.

Economic Life Assumption of Diversified Wells: Unreasonably Long

Diversified's timeline for decommissioning its wells is simply unrealistic. In 2018, the company more than doubled its assumption of their wells' economic lives—from 30 to 75 years! By changing this key assumption, the company was able to radically reduce its ARO liabilities in 2018. In 2020, the company further extended its wells economic lives to 2095, and has maintained, in its 2021 and 2022 financials, that its wells' economic lives will last through 2095.

Figure 6: Diversified's Estimate of End of Economic Lives of Producing Wells



Source: ORVI analysis of Diversified Energy data

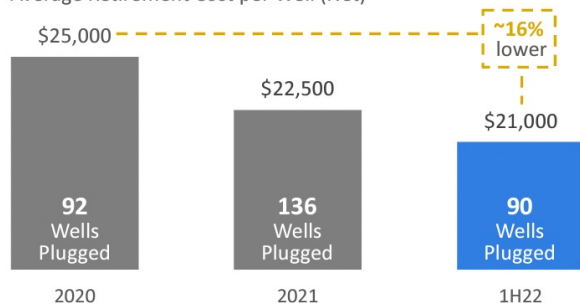
Plugging Costs Remain Suspiciously Low

According to Diversified's financial reports, the company has plugged and abandoned (P&A) 423 wells from 2019 to the first half of 2022 at an average cost of approximately \$23,150 per well.¹¹ In the first half of 2022, the company estimated it has reduced P&A costs by roughly \$4,000, or 16 percent, from 2020 with an average plugging cost of just over \$21,000 per well. One reason cited by Diversified for the cost reduction was a variance it received in West Virginia that allows it to plug some wells at a lower price by not removing metal casing.¹² According to Diversified, this pilot program allowed it to use "new plugging techniques" to reduce the "time and cost of existing plugging processes."¹³ Over the last two years, Diversified has acquired three plugging companies, including Next LVL Energy (PA & WV), Nick's Well Plugging (OH), and Contractor Services Inc. (WV), to generate new revenue and bring economies of scale to reduce costs.¹⁴

Figure 7: Diversified's Low Plugging Costs

Driving Efficiencies in Plugging Costs

Average Retirement Cost per Well (Net)



Source: Diversified Energy, H1 2022: Interim Results Presentation

Diversified, through its new subsidiary Next LVL Energy, is taking advantage of new federal funds to plug orphaned wells. Most recently, Next LVL Energy has been awarded three out of six contracts in West Virginia totaling \$12.6 million to plug 100 orphaned oil and gas wells in the state.¹⁵ Of the 100 orphaned wells Next LVL Energy is required to P&A, only 25 must be “Class A” wells that are either leaking methane or other hazardous materials or that are an impediment to natural gas or coal extraction. The other 75 can be any documented or undocumented orphaned well. At \$126,000 per well, this is six times what the company says it costs to P&A its own wells. On top of securing three bids in West Virginia, Next LVL Energy also received a contract with the Ohio Division of Natural Resources (ODNR) to manage

\$12.5 million from federal orphaned well funds to plug between 85 and 170 wells, which would cost anywhere from \$78,000 to \$147,000 per well.¹⁶

While orphaned wells can be older and more expensive to P&A than new wells, it’s doubtful that they cost six times as much, even if this includes locating and inspecting the wells and managing contracts and third-party oversight. A recent audit of Ohio’s Orphaned Well Program found that the average labor costs of well design and management was about \$17,000 per well.¹⁷

One possible reason for the higher cost per well is that the contract is with the WVDEP using federal funds, which means the company is more likely to follow state P&A procedures and guidelines to ensure the wells are P&Aed properly. While wells are generally inspected during the plugging operation, this doesn’t always happen. As part of their reporting, the US Department of Interior is asking states to include inspection dates and the witness of who inspected the well to ensure compliance with P&A procedures and methods.¹⁸

It is possible that Diversified may not be following state regulations to P&A its own wells. As we noted in our previous report, Diversified has had over 400 violations in Pennsylvania over the past six years for failure to plug an abandoned well and another 250 for other well integrity issues.¹⁹ As a recent report from the National Petroleum Council noted, “most wells are plugged at the lowest cost possible” because they are an “afterthought” that provides “no return on investment” for oil and gas companies.²⁰

A recent analysis by Daniel Raimi and others on the decommissioning cost (another term for P&A) of over 19,000 orphaned and abandoned wells found that surface reclamation, along with the age and depth of the well, are the biggest cost drivers of P&A costs.²¹ It found that each additional 1,000 feet of well depth increased costs by 20 percent, and that older wells cost considerably more to plug than newer ones. Of the 715 wells examined in Pennsylvania, the authors found that the average cost to P&A a well in Pennsylvania was \$48,703 (\$2019) based on an average age of 39 years old and 2,056 feet.

Hydrocarbon Well Services, one the largest P&A companies in West Virginia, estimates the typical cost (1,100 of the 1,500 wells they have plugged) to plug a well that has been out of production for over 20 years with an average depth of 3,000 feet at between \$40,000 to \$60,000, not including site prep or reclamation costs.²² If the well has an obstruction downhole, which can happen 25 percent of the time, the cost can increase by an estimated \$20,000, according to Hydrocarbon Well Services.

An examination of recent wells plugged by Diversified show that they are over 40 years and more than 3,000 feet deep. Table 1 on the following page looks at the 185 Diversified wells plugged in Ohio, Pennsylvania, and West Virginia over the last two and a half years based on data from the TCF Upstream database.²³ The average depth of the wells was about 3,300 ft while the average first year (first spud date) of the wells was 1981 or around 40 years old. Approximately 17 of the 36 wells in Kentucky were horizontal with an average depth of 3,063 compared to 2,058 feet for the 19 vertical wells in Kentucky. Meanwhile, the average depth in Ohio was just above 4,500 feet with an average age of 38 years old.

Table 1: Diversified's Plugged Wells, 2020-2022

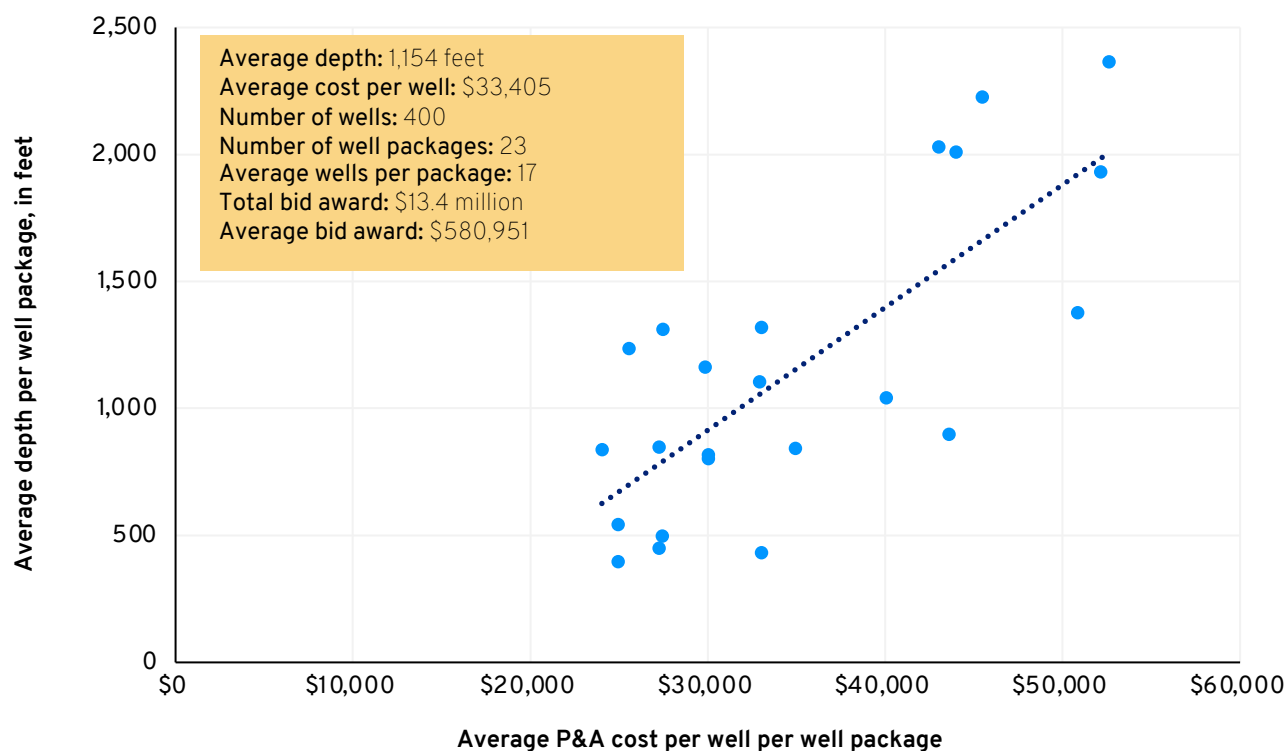
State	Wells Plugged				Average Depth (TVD)	Average First Year (Spud)
	2020	2021	2022 (October)	Total		
Kentucky	14	22	0	36	2,533	1999
Ohio	22	21	9	52	4,532	1984
West Virginia	21	55	21	97	2,903	1973
Total	57	98	30	185	3,293	1981

Source: ORVI analysis of TCF Upstream database.

Note: Pennsylvania was omitted because it did not include data plugged.

Most recently in Kentucky, the state awarded 23 contracts to P&A 400 wells with federal orphaned well funding. While Kentucky estimated that it would cost about \$20,000, on average, to P&A their orphaned wells, the average cost per well in the 23 well packages was over \$33,000. This is based on an average depth of about 1,150 feet and an average contract size of 17 wells. As the chart below highlights, P&A cost tends to increase along with the depth of the well.

Figure 8: Kentucky Bid Awards for Federal Orphaned Well Packages

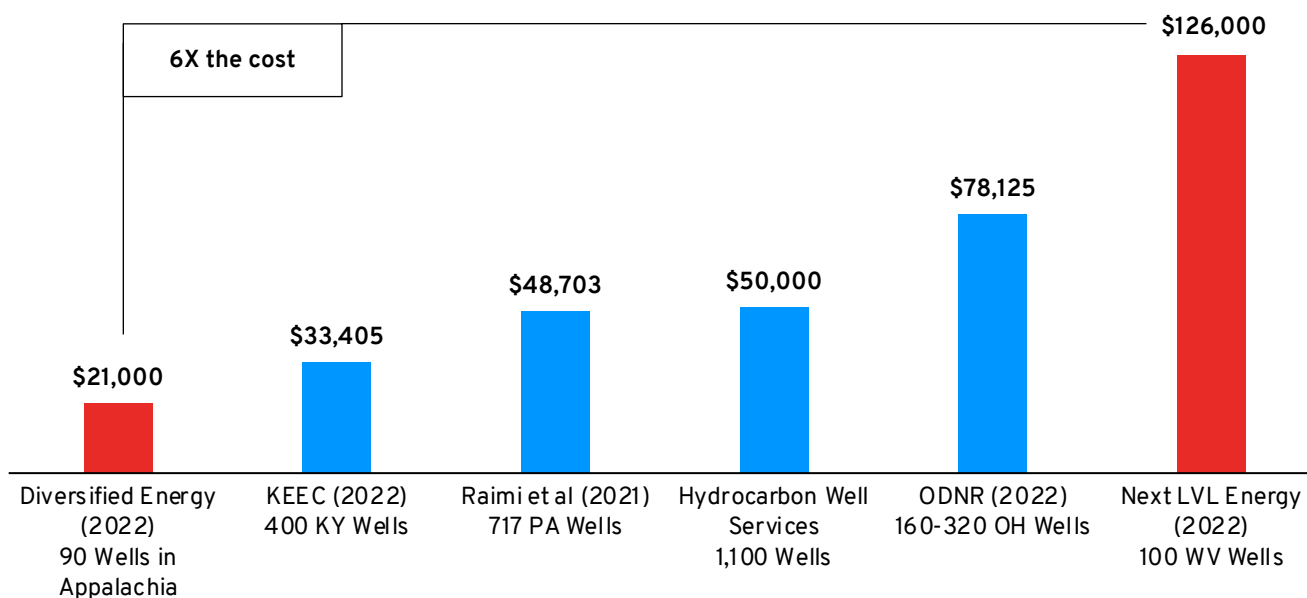


Source: Kentucky Vendor Self Service (VSS) system

Looking more closely at the well plugging packages shows that the average age of the wells being plugged is only a few years older than the Diversified wells plugged between 2020 and 2022 in Kentucky and that the wells are much shallower. For example, Cumberland County Well Package #002 included 25 wells with an average depth of 1,321 feet and an average completion or permit date of 1992 (the spud date is usually within a year or two of the completion date). The winning bid on the Cumberland Well Package #002 was CMC, Inc., with a low bid of \$835,000 or \$33,000 per well. This compares to an average spud date of 1999 and average depth of 2,533 feet for Diversified plugged wells. It is important to note that these bids are for wells that are geographically in close proximity to one another, which should lower costs.

Kentucky P&A costs are generally much lower than Ohio, Pennsylvania, and West Virginia because the wells are shallower and much of the terrain is flatter with fewer obstacles to overcome. State regulators in Ohio estimated that it costs \$79,000 to P&A an orphaned well when they applied for federal orphaned well funding, while regulators in Pennsylvania put the number at \$68,000 and West Virginia estimated it would cost more than \$125,000 per well.²⁴

Figure 9: Per-Well Plugging Costs in Ohio River Valley States



Source: Diversified Energy Annual Report (2022), Kentucky Energy and Environmental Cabinet, Raimi et al. (2021), Hydrocarbon Well Services (website), Ohio Department of Natural Resources, and West Virginia Department of Environmental Protection.

It is hard to reconcile Diversified's reported P&A costs with those from state oil and gas regulators and other plugging companies. Moreover, when they bid to plug wells with federal funding the cost grows nearly sixfold from when they do it in-house. The company has also plugged only a small fraction of its well inventory, and none of its deeper high-volume fracking wells.

Diversified's low P&A costs could also be reflective of poor P&A practices. From 2016 to 2022, the company has received over 600 notices of violation in Pennsylvania for not plugging its wells upon abandonment. Ironically, these violations were superseded because it has signed a consent order and agreement with Pennsylvania to P&A just 20 wells per year.

From 2016 to 2022, Diversified reported spending about \$10.7 million to P&A fewer than 500 wells, which is less than 1 percent of the company's total well inventory in Appalachia.²⁵ According to the Upstream database, Diversified operates 66,900 wells in the Appalachian region, with 98 percent of these wells in Kentucky, Ohio, Pennsylvania, and West Virginia. Diversified also operates approximately 7,500 wells in the Central region of Texas, Louisiana, and Oklahoma, all of which were acquired over the last two years.

Prior to 2016, the company operated fewer than 6,000 wells. So far, the company has not plugged any older high-volume, hydraulic fracturing (HVHF) wells in Appalachia, which can cost more than \$90,000 to P&A.²⁶

More Federal Money for Diversified to Plug Wells

On top of receiving more than \$30 million in contracts from federal orphaned well funds so far, Diversified is poised to also tap into \$700 million of funding contained in the recently passed Inflation Reduction Act (IRA).²⁷ The IRA provides \$700 million in grants to mitigate the methane emissions of “marginal conventional wells”, which are low-producing (below 15BOED or 90 Mcfd) wells, by plugging the wells or by updating old equipment that’s causing methane leaks. As our recent analysis showed, almost all (at least 99 percent) of Diversified wells in Appalachia are marginal oil and gas wells.²⁸ While Diversified claims these funds cannot be used to plug its own wells, that remains to be seen.²⁹ According to the US Energy Information Administration (EIA), there were 733,000 marginal oil and gas wells in 2020.³⁰ This means Diversified owns around 9 percent of the US marginal well inventory and could potentially tap at least \$63 million of this funding to plug marginal wells. In addition to this \$700 million, the IRA also includes an additional \$850 million to reduce methane emissions from wells and pipelines. Diversified owns more than 17,000 miles of pipelines and a network of compression stations and processing facilities.

Shifting Decline Rates, Estimates Used for Cash Flow Far Lower than Actuals

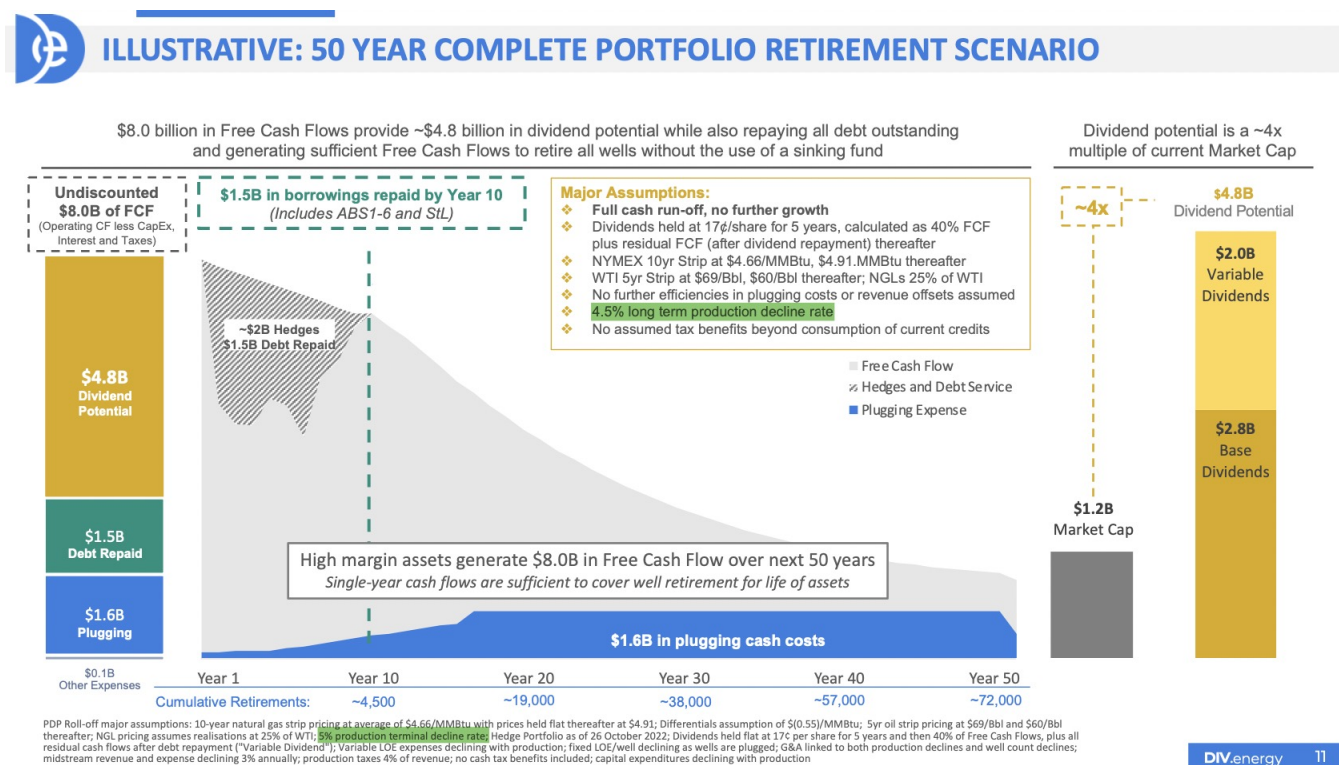
Production levels of natural gas, natural gas liquids (NGLs), and oil decline naturally, with conventional wells declining at a slower rate than unconventional wells. Decline rate estimates for conventional wells can vary from 7 percent to 54 percent, according to an Enverus analysis of decline rates among more than 40 E&Ps.³¹

Over the past three years, Diversified has reported its *actual* production decline rates have steadily increased. In 2019, the company referenced 5 percent decline rates in some reports and 6 percent in others.³² In 2020, Diversified used 7 percent.³³ In various investor reports in 2021, Diversified included numerous decline rates assumptions, including 5 percent, 7 percent, 8.5 percent and 9 percent.³⁴ In its first half 2022 report, the company used 8.5 percent.³⁵

A 2020 analysis by financial advisory firm FLOW Partners suggests the decline rate of 37,000 Diversified wells was 19 percent.³⁶ Meanwhile, an analysis by *The Capitol Forum* in August 2020 found the decline rate of 54,000 Diversified wells to be 11 percent.³⁷

While Diversified reported its company-wide decline rate in 2022 was 8.5 percent,³⁸ it used both 4.5 percent and 5 percent decline rates³⁹ for illustrative purposes in its 2022 Asset Retirement Obligation Supplement. This 4.5 percent or 5 percent decline rate—significantly lower than the actual decline rate the company had reported in other financial filings for 2022—was used to illustrate how the company would be able to fund its AROs on its well inventory out of its free cash flow.

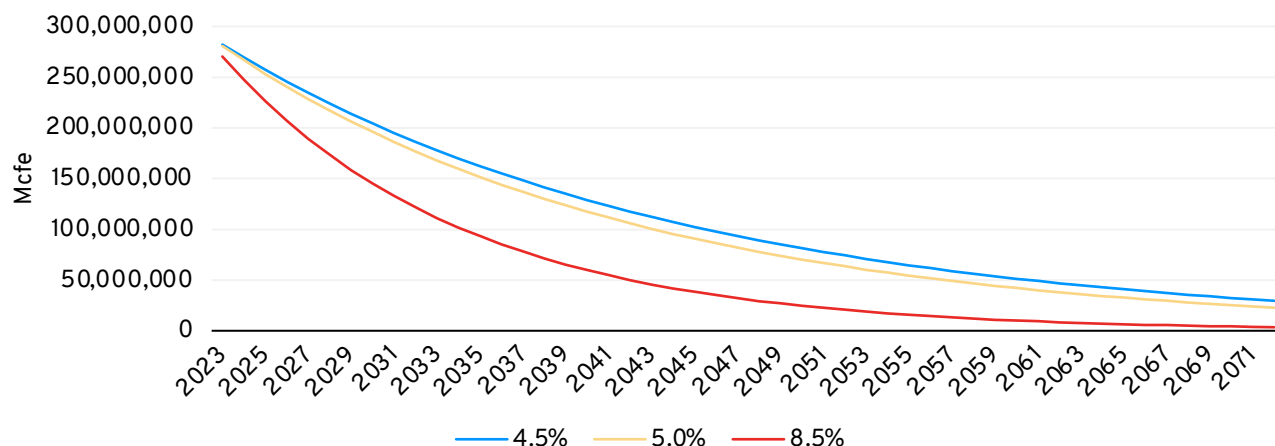
Figure 10: Diversified's Illustrative Plan to P&A its Well Inventory



Source: Diversified Energy, 1H 2020 Financial Report

Decline rates are used to model future cash flows. Just as discount rate assumptions impact the value of AROs, decline rates impact projected future cash flows. Using an overly optimistic decline rate of 5 percent per year in its 2019 financials, for example, allowed Diversified to make unrealistically robust cash flow forecasts far into the future. If actual decline rates, disclosed as 8.5 percent in 2021 financials, are used, then commodity revenue, which accounts for 80 percent to 95 percent of Diversified's revenue, declines far more rapidly (see Figure 10).

Figure 11: Estimated Diversified Production Over 50 Years Using Different Decline Rates



Source: Kentucky Ohio analysis of Diversified Energy 1H 2022 Production

Note: Assumes total production of 295,440 MMcf (million cubic feet of natural gas equivalent).

Why does this matter? Diversified has stated it will use cash flow generated from profits to fund its P&A obligations. If its cash flows are based on unrealistic assumptions about decline rates—significantly understating them based on actual results—then it appears highly unlikely that it will have sufficient cash flow to fund its future obligations.

Conclusion

In 2022, Diversified continued to make questionable assumptions regarding the retirement of its well inventory. As the company continues to acquire more wells in the other shale plays—which will grow its long-term liabilities—it has acquired several plugging companies in Appalachia to not only plug these wells but also generate additional revenue from federal funds to plug orphaned wells. The sizable gap between the company's internal and external P&A costs highlight the need for more scrutiny from state and federal regulators to ensure the proper abandonment of its wells. Diversified's business model of hedging more of its production may give some investors and lenders solace, it has resulted in the company being technically insolvent, by some definitions of insolvency, which only further questions its ability to address its AROs.

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