As a vote of "No Confidence," I plan to WITHOLD my shareholder votes for Calix CEO Carl Russo's nomination to Board. I detail my concerns below. The voting deadline is May 21.

A substantially identical version of this letter was received by Calix's Chairman on Wednesday April 24th, 2019. It was delivered to all Directors on Monday April 29th.

Calix's Earnings Call is Wednesday May 1st. I thought it was important to note these concerns before the larger message was muddied by the details of call.

Steve Kamman, Berkeley, CA

April 28, 2019

Calix's Board of Directors Individually and Collectively. c/o Corporate Secretary, Ms. Suzanne Tom Calix

Dear Mr. Christopher Bowick, Ms. Kathy Crusco, Mr. Kevin DeNuccio, Mr. Mike Everett, Mr. Don Listwin, Ms. Kira Makagon, Mr. Michael Matthews, Mr. Kevin Peters, Mr. J. Daniel Plants, Mr. Carl Russo,

I have grave concerns about the current and future direction of Calix. I assume you share many of them. Sometimes it helps to have someone else put those concerns into words. Hence this letter.

Carl needs help. He may be too proud to admit it. But you can help him nonetheless.

<u>In my view, Calix needs a strong, empowered COO to help Carl run operations day-to-day.</u> Someone whose joy is making the trains run on time.

Calix has the potential to do great things. But it needs someone to dig in and *do* those things. It needs consistent, focused, careful execution that drives steady cash flows. Especially given how far Calix has run down its cash reserves.

Taking that load off Carl serves the best interests of the majority of (non-executive) Calix shareholders. A COO's salary is less expensive than a cash raise.

Continuing with an un-changed executive structure would amount to repeating the same experiment, but hoping for different results.

Carl Needs Help. He's Taken Calix as Far as He Can Alone.

Carl has taken Calix to the cusp of great things. He has delivered inspired, visionary innovation. But his *execution* has taken Calix to the brink of a cash crisis.

- The trap was loaded by spending \$40 million of cash reserves on share buybacks just before losing tens of millions on cash-burning Services contracts all while operating at a structural loss.
- Calix now risks springing that trap shut after mis-executing a crash plan to shift

production out of China in only 2 quarters.

• We are one mis-step away from a ruinous cash crunch.

<u>In his prior roles, Carl has done best when paired with strong, operationally-minded executives to handle the day-to-day.</u> Calix shareholders have suffered from the absence of that complementary, counter-balancing skill set.

Calix' stock is @60% below its \$13 IPO price over a period the S&P 500 returned 198%. CALX has generally traded below 1x EV/Sales for 3+ years. The company has burned down cash. It is now navigating its 2nd self-inflicted operational crisis in 2 years. We may risk a cash crisis. All against an improving economic backdrop.

I've Owned a Lot For a Long Time. I Know Calix and Carl Well.

I own XXX,000 shares of Calix (some since 2011). That puts me among your top 10-20 shareholders. If you eliminate computer-driven and index funds, I am likely one of your top 10 *human* shareholders.

I know Telecom Equipment and Calix. I covered both at Fidelity Investments and CIBC/Oppenheimer since 2001. At Fidelity, I bought into Calix's 2010 IPO at \$13. Over 2011-2013, I experienced first-hand a now-familiar pattern of bold promises (taking CALX to \$22) and weak follow-through (driving it down to \$5).

I also know Carl Russo well. I first met Carl in 2001. I am personally fond of Carl. But I have done my due diligence over those 18 years. Carl is a visionary thinker and a great salesperson. He is less strong in execution.

Over the past year and a half, I have sought to engage with Carl. I have concluded that is no longer, and may never have been, constructive.

Calix's Recent Track Record Points to Continuing, Structural Weakness in Oversight, Controls, and Operational Execution.

Operational discipline has been a recurring weakness at Calix since the IPO. But I will focus here on patterns over the past two years. In 2017 and now 2019, mistakes were made that lie directly in the remit of a CEO or COO.

- Supervision, oversight, and remediation of Executive-level errors.
- Internal communications and chain of command.
- Investor communications, relationships and reputation.

2017: Unrealistic targets, weak oversight and flawed execution dragged Calix into a self-inflicted crisis that consumed tens of millions of dollars. We can't quantify revenues lost from un-signed customers worried about viability/valuation. Most investors walked away.

Carl is not responsible for negotiating those money-losing Services contracts. But look past that immediate error. Consider the response that followed.

My concern lies in how long it took - 5 to 8 months - to uncover, investigate, and scope those losses. It was a delayed, fumbling reaction that points to deeper structural problems. That failure of supervisory oversight was the CEO's responsibility.

• On the May 9, 2017 call, Calix gave guidance for an extremely strong second half

- rebound. This was based on (false) confidence the Services problem was confined to Windstream. In retrospect, that guidance was clearly fantastical.
- Evidently, 5+ months in, senior executives <u>still</u> hadn't understood the breadth and depth of the baked-in contract losses that would drag down the rest of **2017.** Calix had already fired the executive responsible. Why hadn't anyone dug deeper by May 9th? An effective operational manager would have immediately investigated and quantified the risks embedded in *all* the contracts. Instead, Calix sailed on blindly toward an iceberg dead ahead.
- A broken internal communications dynamic most likely explains how senior management remained ignorant long enough to deliver that fantastical May 9th guidance. It took 5 to 8 months for executives to understand the damage buried in those contracts. It beggars belief that lower-level staff at Calix didn't already know more Services contracts were rotten. So why didn't senior management know until sometime between May 9th and August? Middle and line management clearly chose NOT to pass the bad news up the chain of command. Senior management didn't dig deep enough to find out. Then it bubbled up in the numbers.
- Calix didn't disclose the damage to shareholders until the scheduled August 2017 call. With no pre-announcement, the result was a chaotic "surprise" call that lacked clarity. The stock dropped @40%. The reputational damage was far greater. Analysts have dropped coverage. Meeting schedules are hard to fill. I know first hand than many investors have simply removed CALX from consideration. Calix is generally perceived as a sort of "hobby farm" for Carl.

2019 - Echoes of 2017: Calix is exhibiting a similar pattern of failure in the botched production shift out of China. I do not yet know, before the call, how bad the situation truly is. *Even if it isn't as bad, 2019 bears the same hallmarks of insufficient oversight and poor internal/external communication.*

- Overly aggressive targets set beyond the organisation's capability to deliver.
- Weak oversight of day-to-day execution to reach those targets.
- Delayed recognition and/or disclosure of the problem. Calix held its call on February 5th. Someone at Calix already had to know production was going badly 5 weeks into the quarter with only 7 weeks left to qo.
 - If Senior Management <u>didn't</u> know. Why isn't bad news making it up the chain? What structural/cultural failings does this point to?
 - If Senior Management <u>did</u> know. Wasn't it already evident by February that Calix would struggle to make its 1Q19 production goals? Why wasn't that disclosed? When was the Board told?
 - The February call also saw a -25% stock price drop from a revenue miss Calix' management did not judge material enough to pre-announce. *News that cuts the price -25% would seem "material" by definition. That judgement call further undermined investor confidence in Calix.*

To Achieve Carl's Vision, Calix Needs Someone to Execute On It. A Different Skill Set.

Steady, focused, operational oversight is critical at any company. A repeated pattern of failure in 2017 and 2019 makes clear that is lacking at Calix.

Carl is a visionary thinker and a brilliant salesman. He deserves tremendous credit for bringing Calix to the cusp of great things.

But Carl is (still) operating without the effective, empowered counter-balance he so clearly needs. That balance was key to his prior success.

Mistakes will be made. A COO won't stop that. A strong COO *can* minimize shareholder's losses from those mistakes. Surfacing problems before Calix sails blind into an iceberg. Setting achievable targets with realistic margins for error.

At this point, Calix needs execution more than it needs vision. Especially given the tight cash situation. Hiring a strong COO will cost shareholders less than raising cash on ruinous terms.

An Intervention Serves the Best Interests of Non-Executive Shareholders. The Board Should Help Carl. Even if He Isn't Asking for Help.

Today, Carl is still alone at the helm. He is too stretched. He has no-one to counterbalance his blind spots. He needs someone.

The situation does not give me a great deal of confidence in Calix's prospects. Especially over an operationally critical 2 years with so little cash on hand.

I invested in Calix because its valuation did not appear to square with its future prospects. Today, Calix *still* could be on a path to great things. That much-delayed potential is why I have so far held on to my investment.

- With Verizon, CityFibre, and others ramping up spending, 2020 Revenues of \$500m to \$600m and Earnings of \$0.50 to \$1.00 seem reasonably achievable.
- With 5G ramping up and broadband becoming a basic utility, revenues and EPS well above that are achievable in 2021 and beyond.

Calix just needs focused, steady, patient execution.

Carl needs help.

Hire someone to help. Get the trains running on time.

Your views may differ, but I am sure you have considered some of this yourselves. My hope is this letter might clarify those thoughts and encourage you to act on them. I look forward to discussing this further.

Sincerely y	ours,
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Steve Kamman