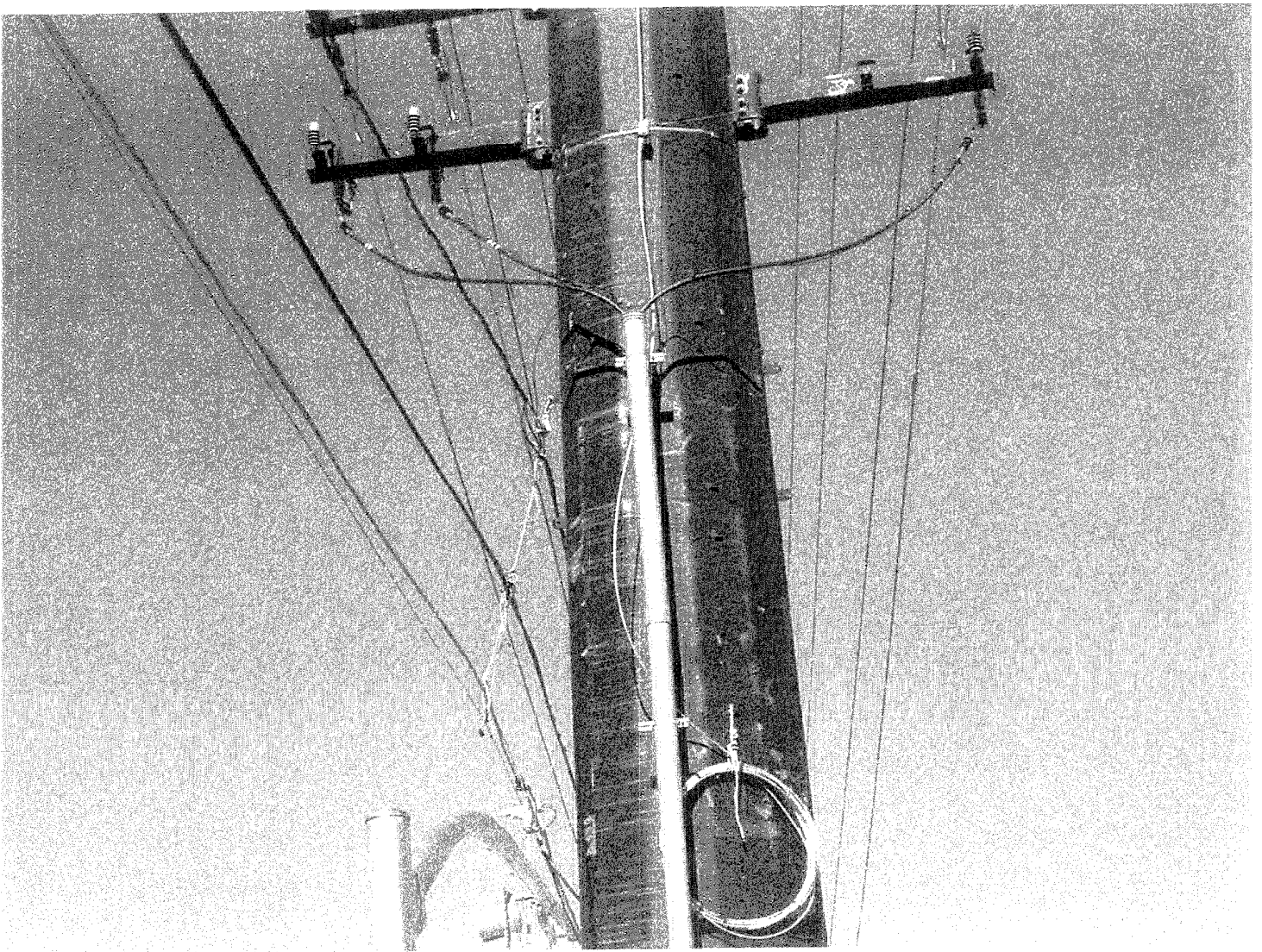


# **APPENDIX 1**

# PHOTO 1

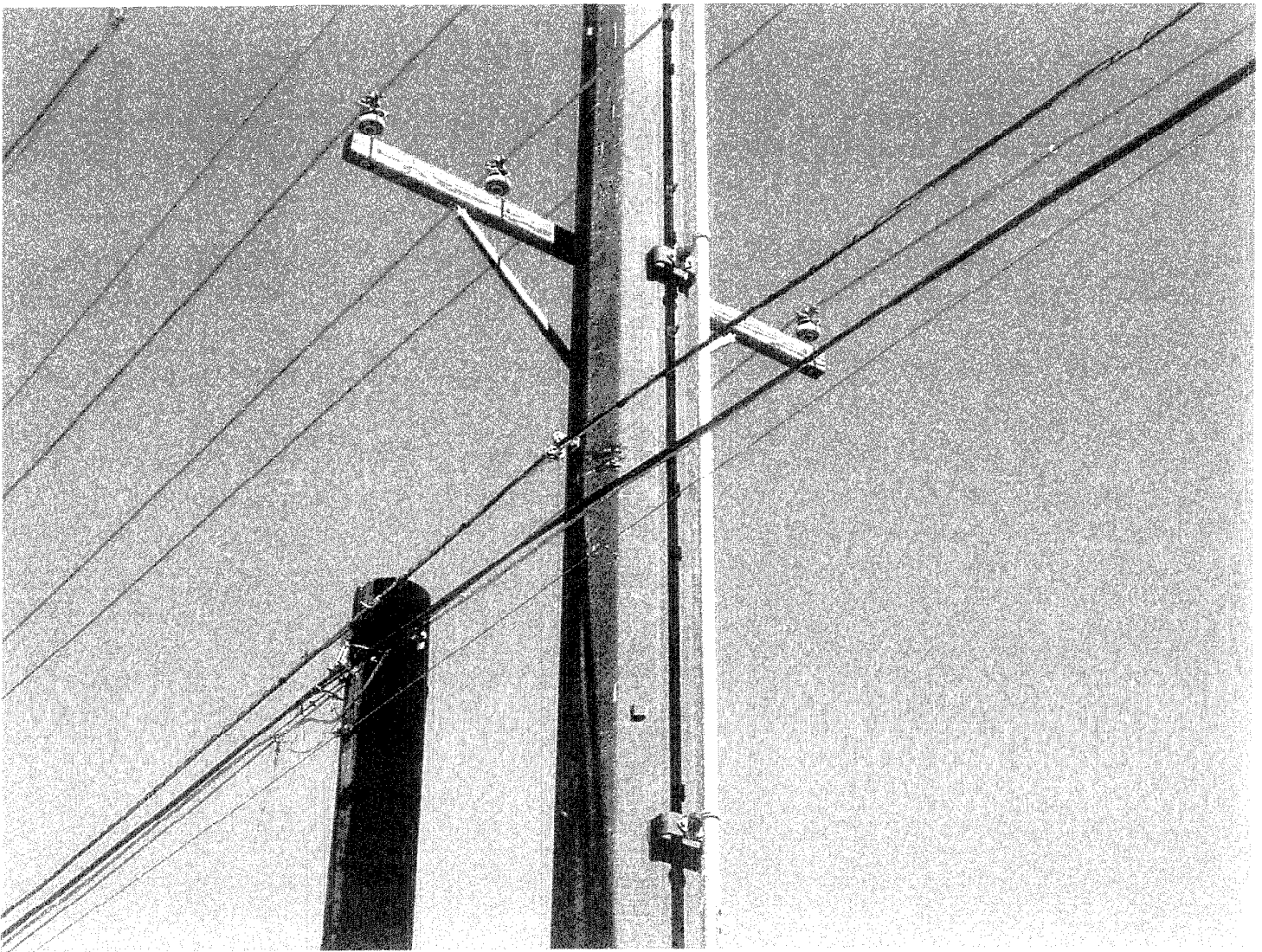
This is the pole that I mentioned in my initial testimony. The power company transferred Comcast's cable from the old pole to this new large black transmission structure and "secured" the Comcast cable to electric conductors above it with rope. This is a very unsafe practice because the rope deteriorates quickly in the sunlight and breaks. PacifiCorp, as is its current practice, provided no notice to Comcast that it was doing this.



## PHOTOS 2 and 3

These two photos show that PacifiCorp has replaced an existing wooden pole with a large metal transmission structure with under-built distribution circuits. PacifiCorp has built down on the new transmission pole to within inches of Comcast's facilities so that Comcast will not be able to lower its facilities sufficiently to transfer from the old pole to the new structure. Comcast will most likely need to place its facilities underground at considerable cost. This situation could have been avoided if PacifiCorp had raised its facilities sufficiently to allow Comcast to make the transfer and I think illustrates the need for cooperation and good communication between joint users that I have emphasized throughout my testimony.

The second photograph identifies the old wooden pole that is in the first photo of this series.



PACIFICORP  
113-03-01#  
038500

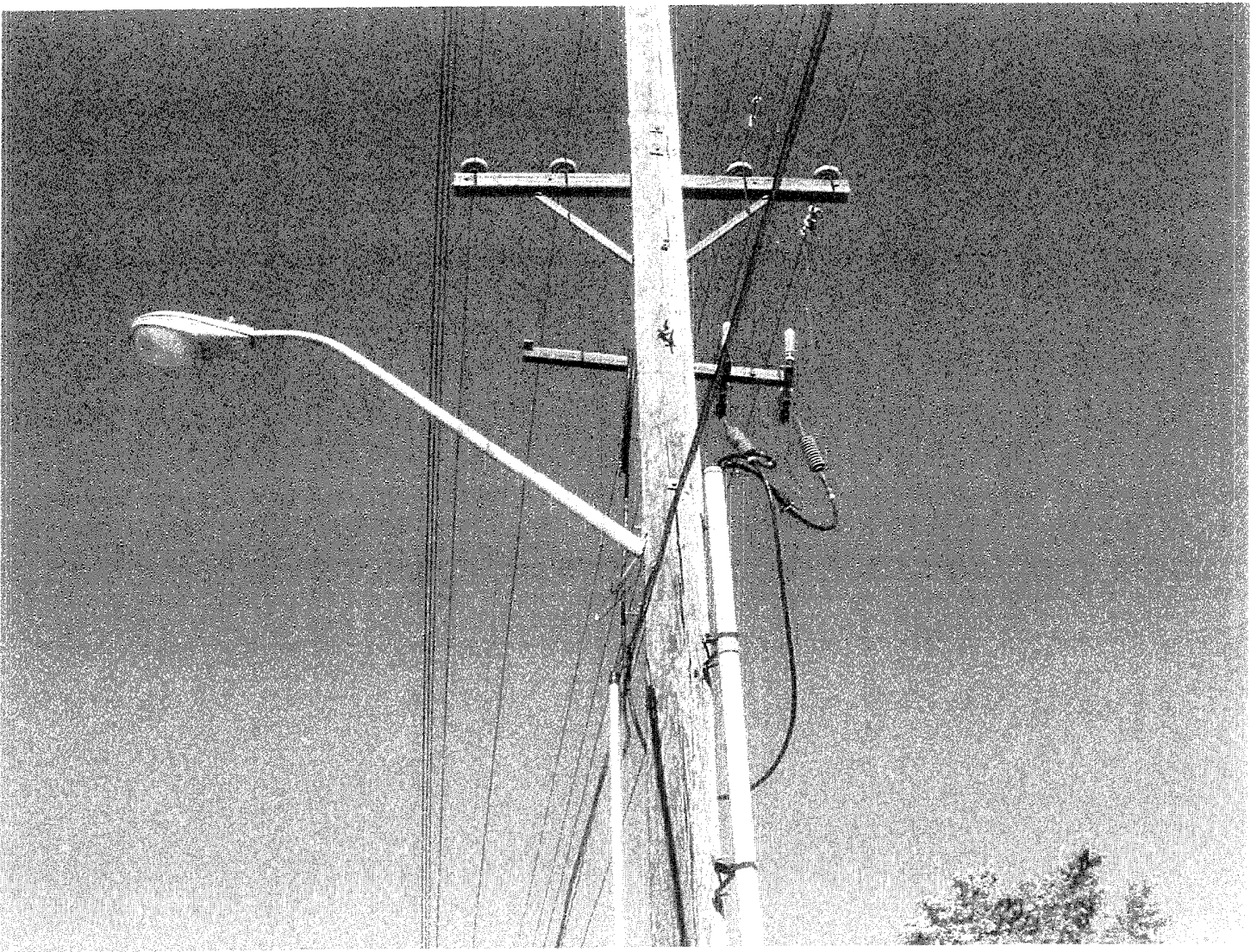
22





#### PHOTO 4

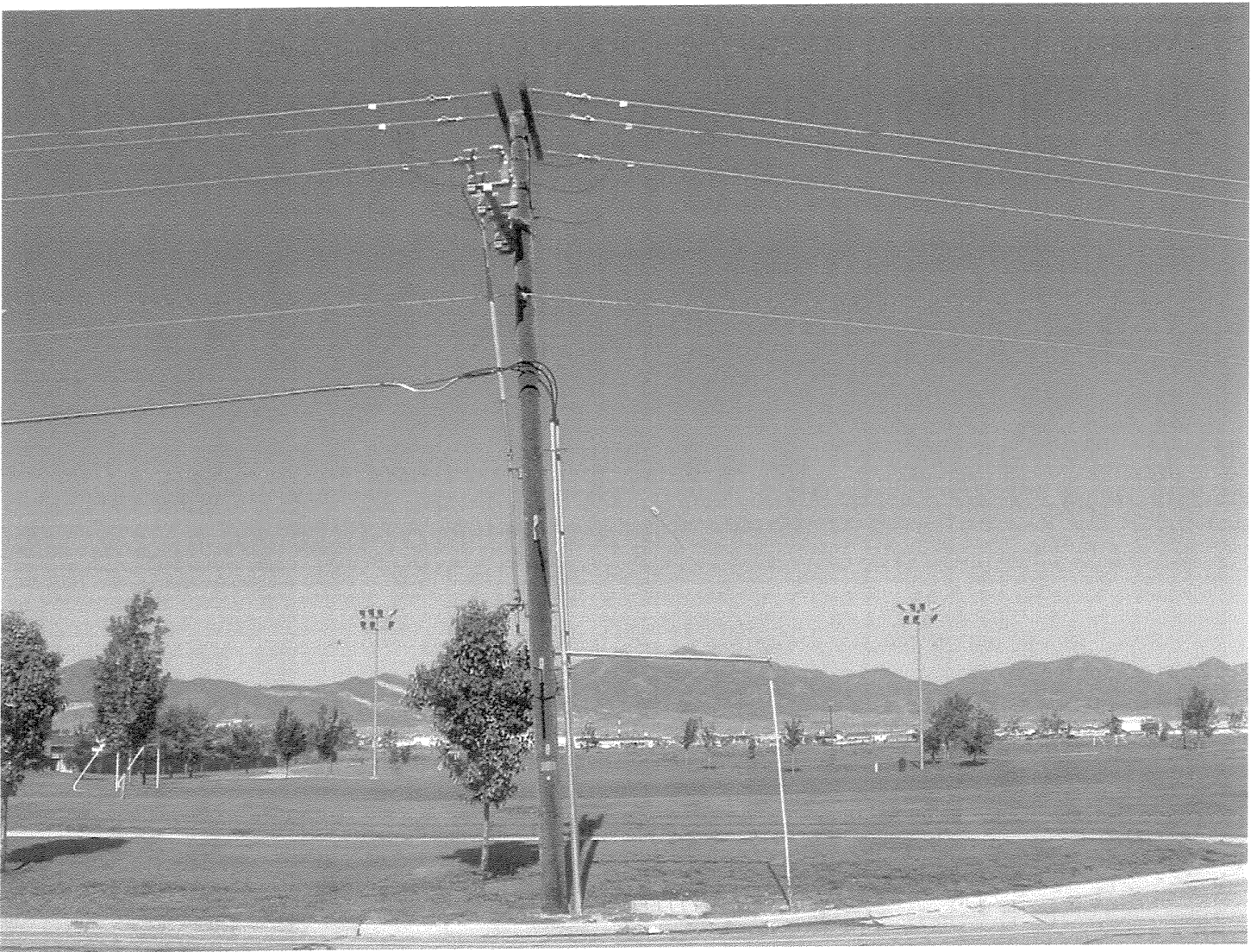
This photo shows a number of very unsafe PacifiCorp construction practices. It can be clearly seen that PacifiCorp has left an (ungrounded) primary voltage cable looping out of the riser conduit, behind the pole, under communications and then coiled on the opposite side of the pole around the lower cross arm. This violates a number of clear-cut safety standards including work rules in NESC Part 4 and the PacifiCorp construction standards. This photo also shows that the street light lead is less than 12 inches above the communications cable. The cable tv line has been in place for many years. It is likely that the light has been placed or replaced after the cable was installed.



## PHOTO 5

The next two photos show situations in which I believe that PacifiCorp has acted unreasonably with respect to Comcast because PacifiCorp refused to re-sag its lines. It could have done this with minimal expense. It refused, and Comcast was forced to bury its cable underground.

The first photo depicts the Comcast cable, the lowest on the pole, going down metal conduit risers down the pole and underground because the power line sags too low and PacifiCorp was unwilling to re-sag it.





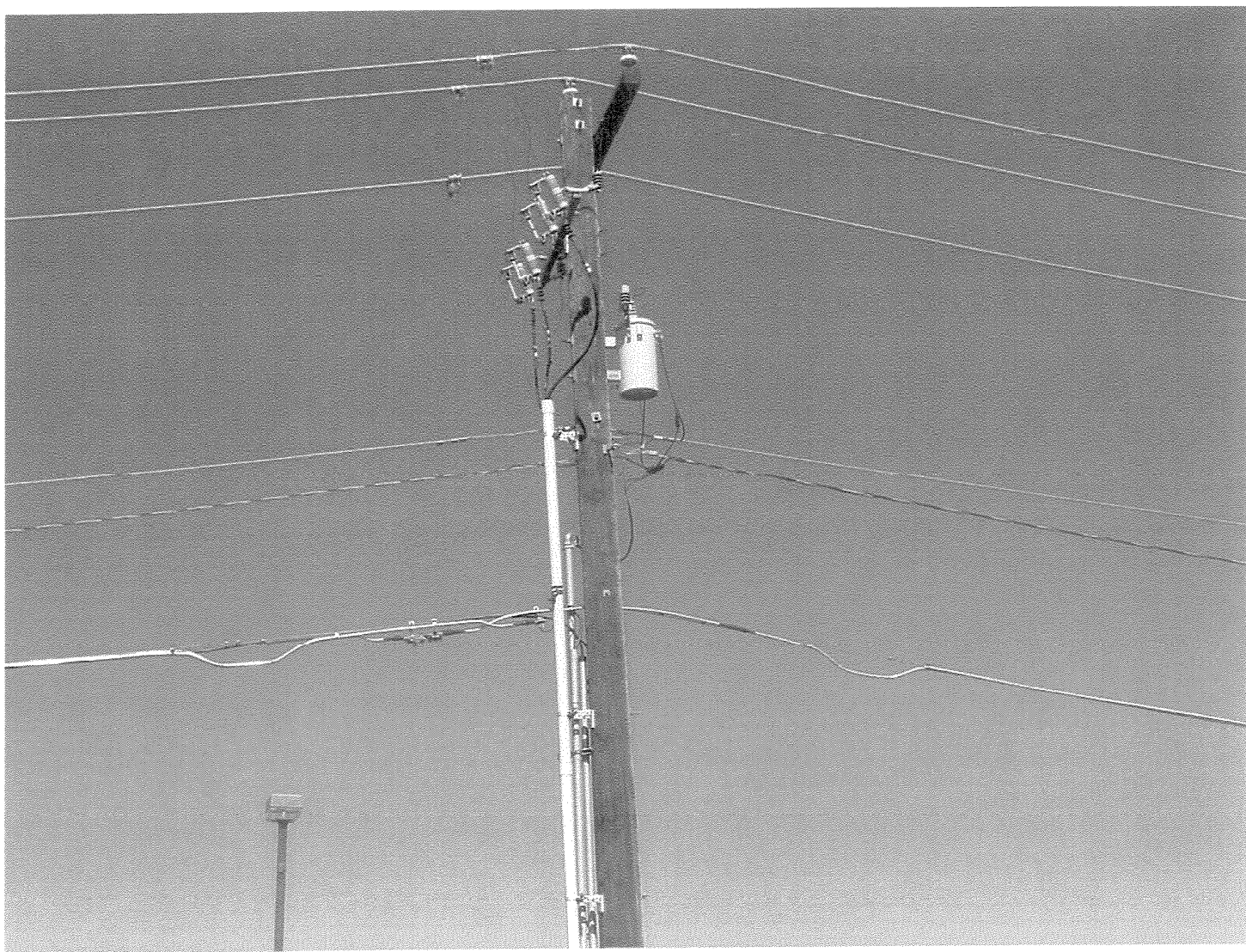
## PHOTO 6

This photo shows the same pole depicted in the previous photo, and shows the deep sag in the electric facilities that the power company was unwilling to fix.



## PHOTO 7

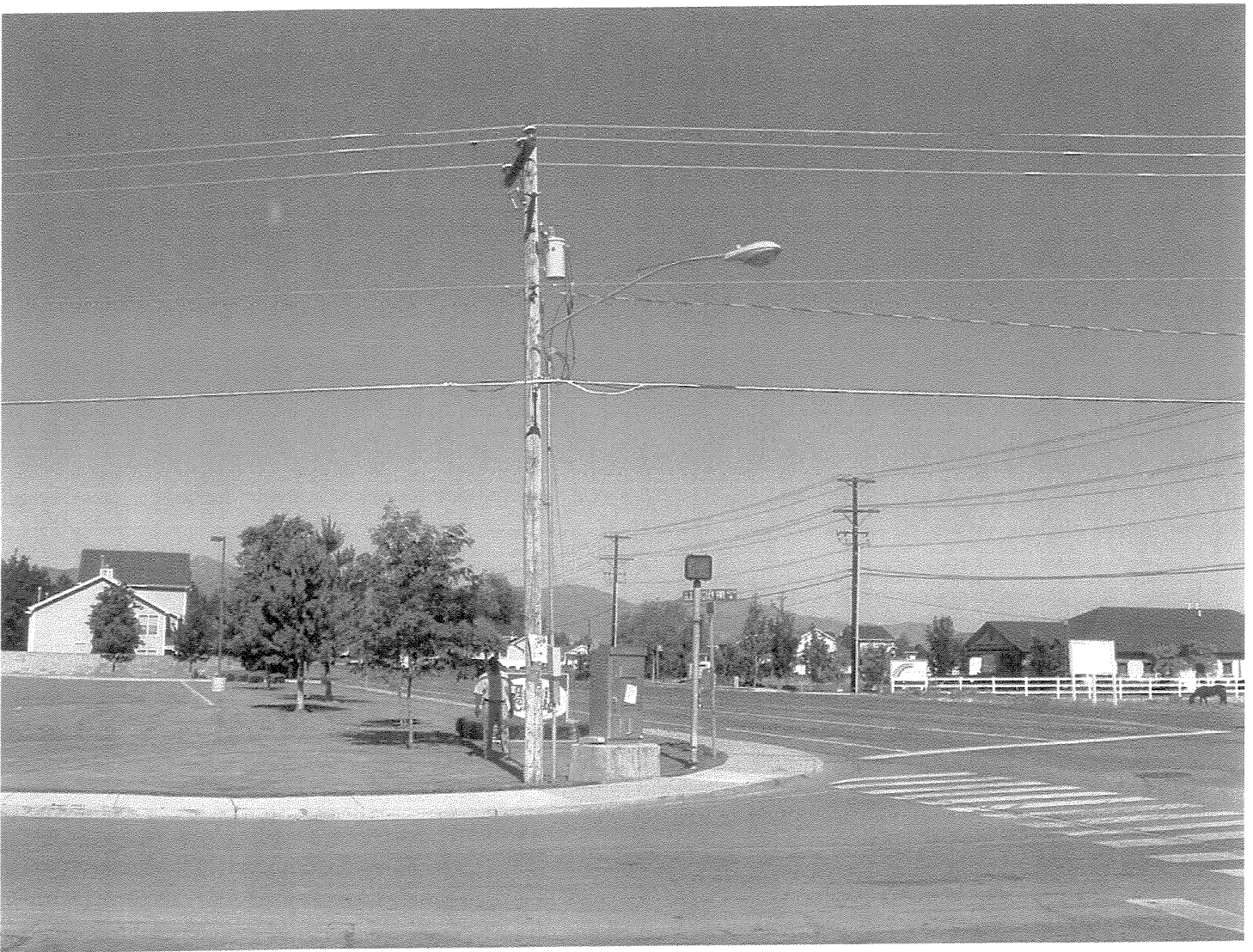
The next two photos show very clearly that the electric utility has a secondary connection to a weather head that is much lower than the required 40" clearance for this sort of configuration. The next photo shows a similar violation.





## PHOTO 8

This is another example of another weather head violation of the communications space. Notice that the power loops coming out of the transformer and into the weather head actually dip below the cable tv line at the bottom of the pole. The cable tv facility has been there for years, and the power to the traffic signal controller is relatively new. Comcast's Rodney Bell is very familiar with Comcast's plant and informed me that the cable plant was already in place when the electric line was connected to the weather head.



## PHOTO 9

This photo presents an interesting case of an instance in which the electric company has installed the street light just a few inches below communications. This violates NESC rules 238D and 239G, which requires that street light leads be installed 12 inches *above* communications or 72 inches below. These violations could have been avoided if PacifiCorp had simply notified Comcast that it intended to install a street light, and Comcast could have re-worked its attachment to allow the streetlight to be properly installed. It is also clear from this photograph that the street light supply cable coming from the next pole in the run (toward the mountains) sags well below the Comcast cable. The NESC requires 30 inches of separation, and this is yet another example of how easy it is for the power company to clear a violation with proper sagging and tensioning of facilities.





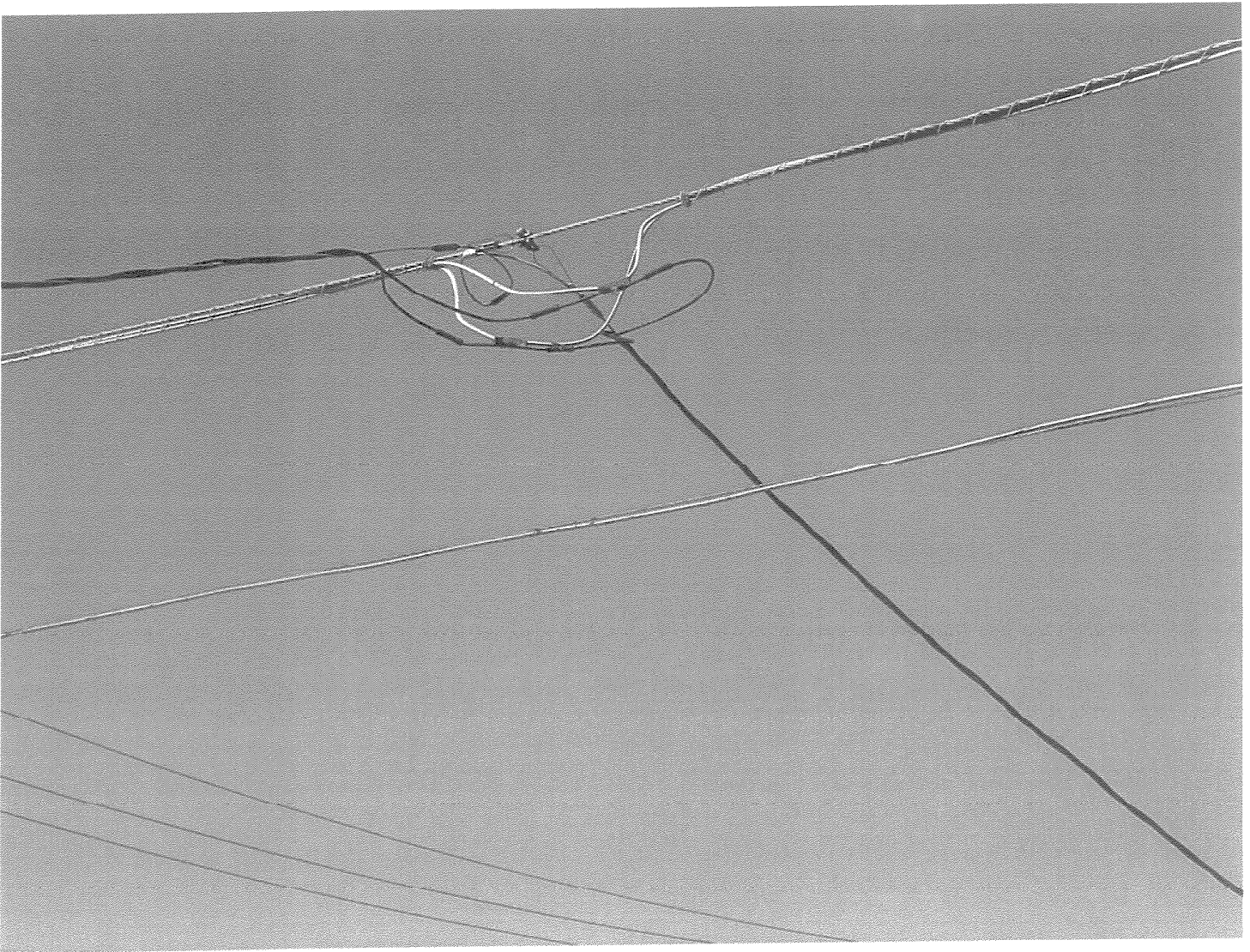
## PHOTO 10

The next photograph is another good example of the widespread occurrence I observed of street light supply cables drooping too close, or even below communications. This, again, often can be cleared up by re-tensioning the electric cable.



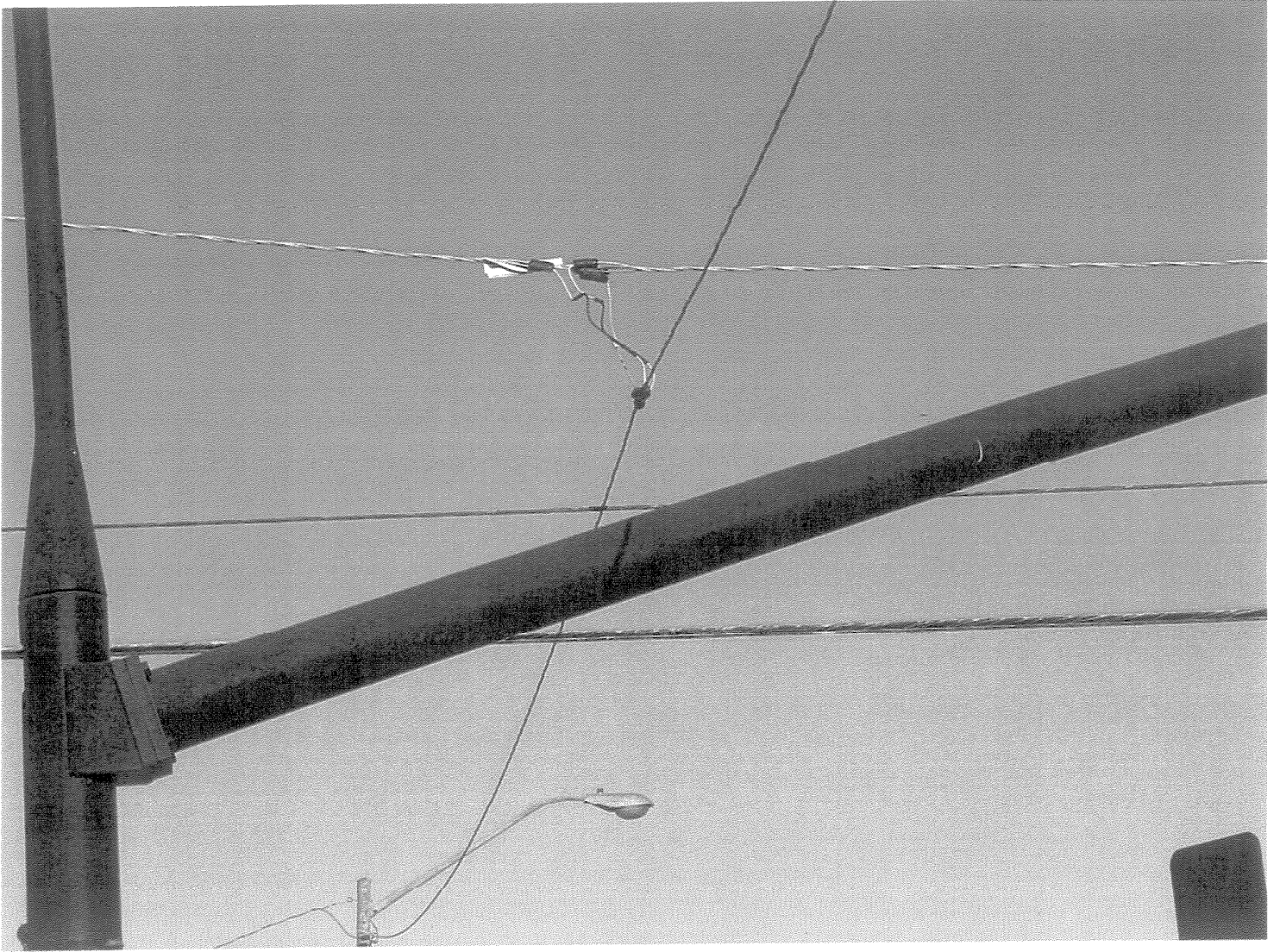
### **PHOTOS 11, 12, 13 and 14**

An example of another type of violation that I saw very often appears in photos 11-14. These are good examples of the common PacifiCorp practice of connecting electric service wires in the span between poles. This creates additional weight on the span and forces the secondary cable into violation with cable because the correct NESC clearances are not maintained. This violates NESC Rule 235C2B. A similar violation can be found in the next three photos, 12, 13 and 14, which, while supplying street lights as opposed to customer services drops, create an identical violation of the 30-inch rule.

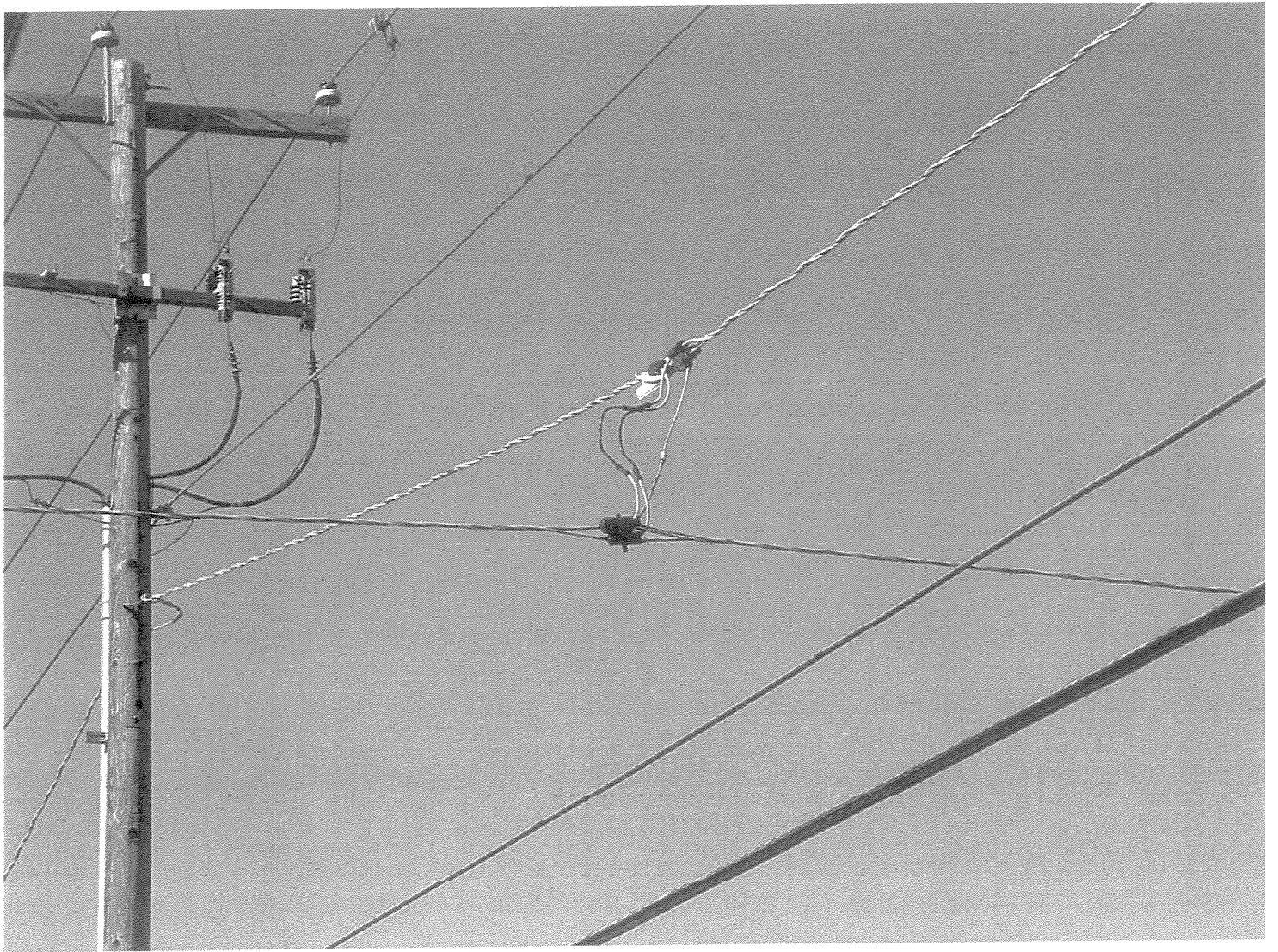






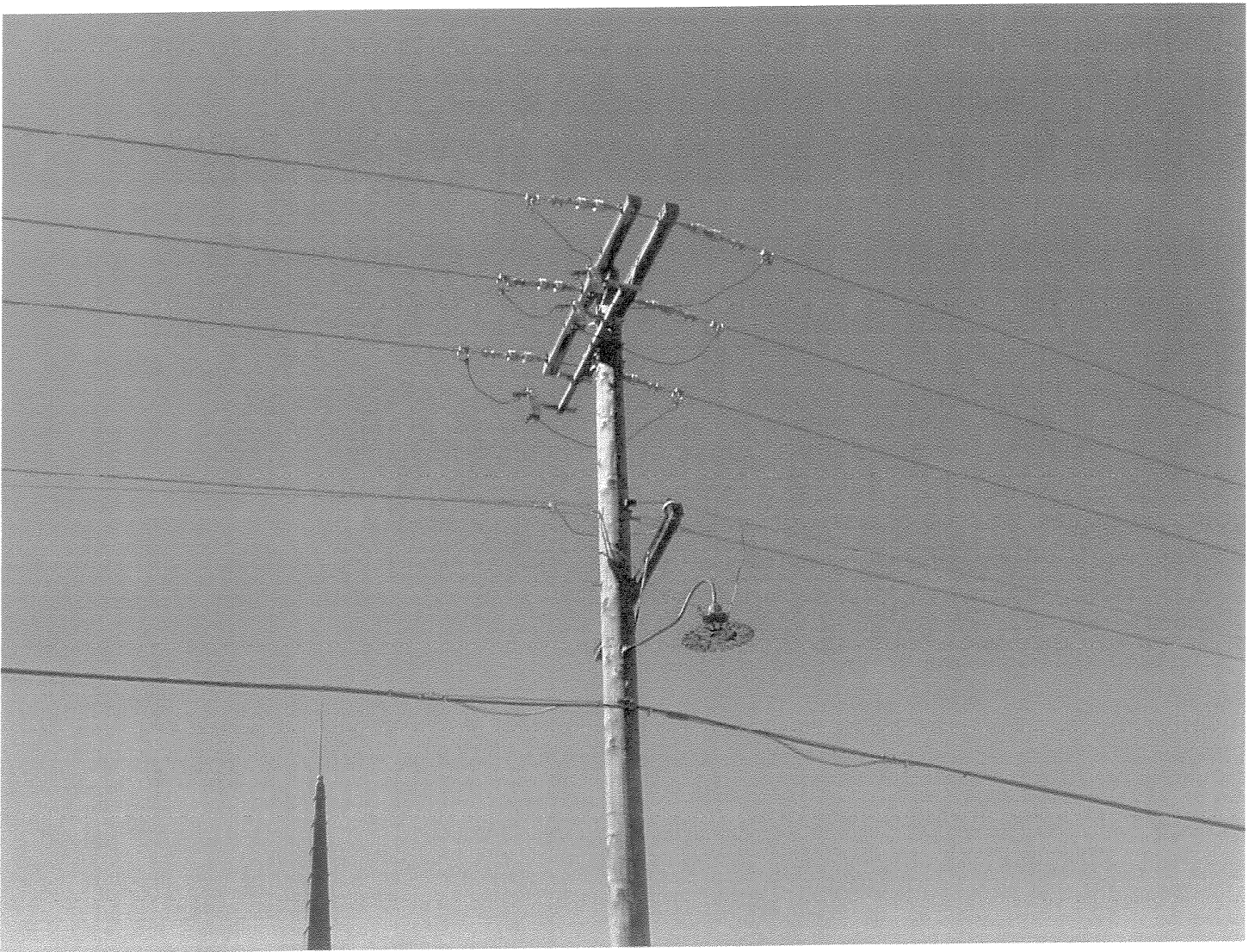






## PHOTO 15

Here you can see a relatively new PacifiCorp pole (I would estimate that it has been in place for only a year or two). While the pole is new, it shows that PacifiCorp has retained an incandescent street light fixture that virtually all power companies phased out between 30 and 50 years ago. I include this because it shows that PacifiCorp is using wiring techniques that are very old. In fact, I would expect that PacifiCorp would be hoping to eliminate this kind of configuration at some point. Notice in this photo how the street light leads go directly from the series circuit down to near the light-bulb socket. This series or arc circuit is on the wood cross arm with the primary voltage conductor on the shorter poles that you will notice in the next (and last) photograph. Its location on the primary arm makes it more hazardous to work on or near.





## PHOTO 16

While you cannot tell clearly from this photograph, I personally observed that this series (street light) circuit continued not only for a few poles, but for miles. It is possible for workers to work safely around these circuits, but it is quite a bit trickier than more modern configurations because the low voltage lighting circuit is on the same cross arm as the high-voltage primary conductor. My main purpose in including this level of detail here is to show that PacifiCorp has facilities in place that are obsolete, cumbersome and inefficient by any modern, reasonable standard and which were phased out decades ago by other utilities.

