

W.S.F.P.I.: A Nuts And Bolts Look At 1977

The Story Behind The Annual Report

At the upcoming annual meeting of Warm Springs Forest Products Industries tribal members will learn the "state of the enterprise." But how much will they really know about the sprawling complex of buildings called The Mill?

Being the equivalent of a stockholder in the forest industry does not guarantee an understanding of its operations. A surprising number of tribal members have not seen the inside of the mill. Planer, lathe, gang saw and green chain are mysterious terms to many.

Acres of buildings and machinery noisily engage in the process of converting a tree to a salable product. The financial result is clear -- WSFPI's valuable economic contribution to the Tribes is well understood. But how many tribal members can tell an inquisitive non-member how the mill produces and sells lumber, studs, veneer, plywood, chips and now even energy from the reservation's wealth of pine and fir?

At the annual meeting, members will learn that 1977 has brought to WSFPI increased income, the resignation of Pershing Andrews, energy self-sufficiency and the decision to for-

mally evaluate the whole operation.

The coming year may prove to be a turning point for WSFPI. A new general manager (see article, page 1) will oversee the completion of projects begun last year and undoubtedly bring a new style to management.

Later in the year the findings of the Master Development Study may point a whole new direction for the forest industry. An EDA grant has enabled WSFPI to hire experts who are taking a long look at the changing forest resource, marketability of products and the facilities needed to best utilize logs that will be available for years to come.

And for now the mill clatters on, hardly skipping a beat.

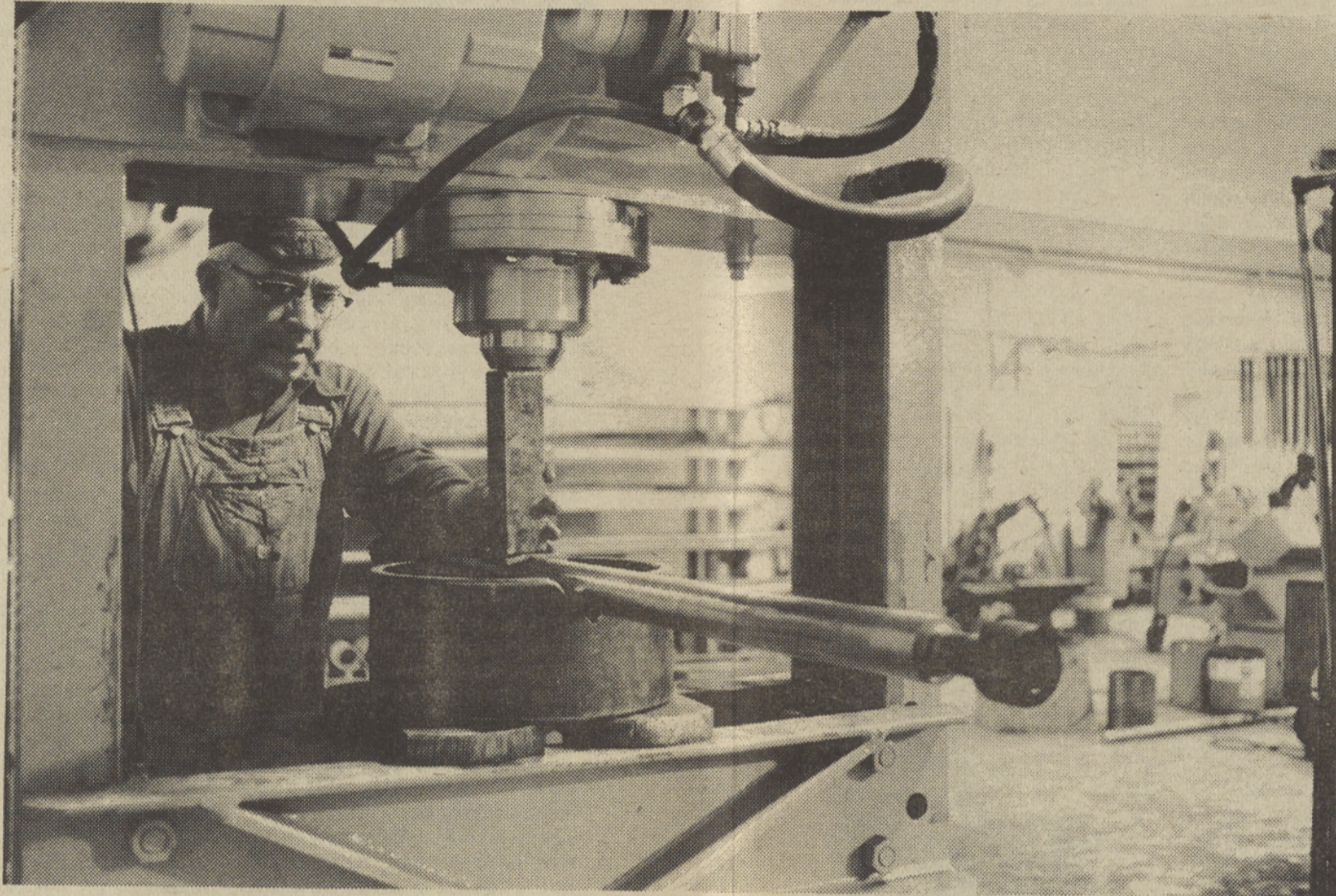
An annual report full of charts and figures, goals and accomplishments tells part of WSFPI's story. But the rest of the story can be found inside the buildings where ongoing changes are making the daily operations of the mill more efficient.

Spilyay Tymoo offers a nuts and bolts look at a few developments, small and large, that have helped keep the mill humming and the figures black through 1977.

Text and Photos by Cynthia Stowell



Lumber delivered in unitized packages is more attractive to markets and more efficiently loaded. At WSFPI's expanded loading dock in Madras, forklifts hoist packages of lumber onto flatcars or boxcars from track level. The old platform (rear) was designed for loose loading, an outdated method of handling. Plans are to extend the track and concrete slab to allow for more shipments each day.



The new machine shop at the mill is bright and airy with plenty of room for the safe operation of equipment. Ken McKenzie and his co-worker maintain all the mill's equipment, repairing old parts and making new. Even the hydraulic press above was built right in the shop. Time and money are saved by servicing machinery on-site.

A Safer, Roomier Machine Shop

With repair facilities so distant, WSFPI has found it practical to maintain the mill's machinery on site. Until August of 1977 the machine shop was housed in a cold dark building that became more and more cramped as equipment was added. Increased versatility unfortunately meant less efficiency and greater hazard to the workers.

The two machinists, Ken McKenzie and Eldon Lang, moved themselves and their equipment out of the 1943 vintage building last August and are luxuriating in the warm, bright spaciousness of their new quarters.

McKenzie noted that he and Lang can work faster and more efficiently in the new shop, which is open to other workers for equipment use.

The machine shop does virtually all the maintenance for the plant. The two men rebuild old parts and manufacture new

parts, for which they keep detailed drawings for future reference.

Moving to the new shop did not increase their capability, though, and very large parts still must be sent out for repair.

McKenzie cited several advantages of their on-site maintenance. For one, the machinists are familiar with all the machinery at the mill. "You work on every bit of it at one time or another," he remarked.

Repairs can be done more quickly because there is no

transportation time involved. And the economic savings are significant. McKenzie said he could make \$50 nuts for the barker for \$16.

The shop has even produced a piece of its own equipment — an 80-ton hydraulic press built right in the shop in 1973.

Currently the machinists are rebuilding parts of the third steam turbine in the power house, a job that is undoubtedly more pleasant in the safer, roomier shop.

Unit Loading Means More Valuable Product

The packaging and shipping of finished products destined for distant markets is a less glamorous part of the forest industry than the earlier phases, such as logging.

But delivery is essential and the better the job is done, the more valuable is the product. WSFPI further streamlined its delivery system in 1977 with the purchase and expansion of its Madras loading dock.

Unitized loading, where the product is packaged in standard sizes, sorted roughly to length, bound by steel straps and sometimes wrapped, is replacing the

old loose loading method of handling wood products.

Loading by unit is faster and more efficient than board by board handling and is increasingly demanded by markets.

WSFPI added a packager in 1976 and made unit loading into railroad cars easier by expanding its Madras facility in 1977. The track was extended and a covered concrete slab added. This meant that flatcars and boxcars could be loaded at track level by forklifts.

Lumber and studs are packaged in Warm Springs and hauled to Madras by truck to be unit loaded into railroad cars.

Occasionally wood is loose-loaded, when cars with sufficiently wide doors are not available.

The old dock was designed for loose-loading, with the floor of the car below the dock level. The new slab at track level is both less expensive to construct and easier to use because forklifts can load from both sides.

Since transporting by railroad is more efficient than by truck at distances over 200 miles, WSFPI plans to further expand its rail loading capability by extending the tracks and slab as soon as weather permits.

Powerhouse Supplies Mill With Energy

Giant piles of waste have disappeared from the mill site since two of the three 3000 kilowatt turbines were fired up in mid-1977. So hungry are the boilers that WSFPI is actively looking for more bark and sawdust to consume and convert for its own energy needs and for sale to Pacific Power and Light.

A third standby generator is nearing completion, a reassembly process that began in 1975 when the parts were shipped from Alaska.

When two generators are operating full-time the mill is energy self-sufficient during all its shifts and realizes a monthly savings of \$17,000, according to manager Pershing Andrews. Self-sufficiency provides the assurance that the mill will continue to run despite power shortages or other external problems.

Excess electricity has been sold to PP&L for 10 mills per kilowatt, meaning income on top of the savings and security.

The new power house has also eliminated the need for the smokey and hazardous wigwam burner that destroyed waste the old smaller (600 kw) generators could not handle.

Increased boiler capacity enabled the gas dryer to be moved from its Madras site to Warm Springs in 1976 and converted to steam at a savings of about \$15,000 per month.

WSFPI is now faced with the challenge of maintaining a steady supply of fuel. Only one generator is operating presently while sources of bark and sawdust are located.

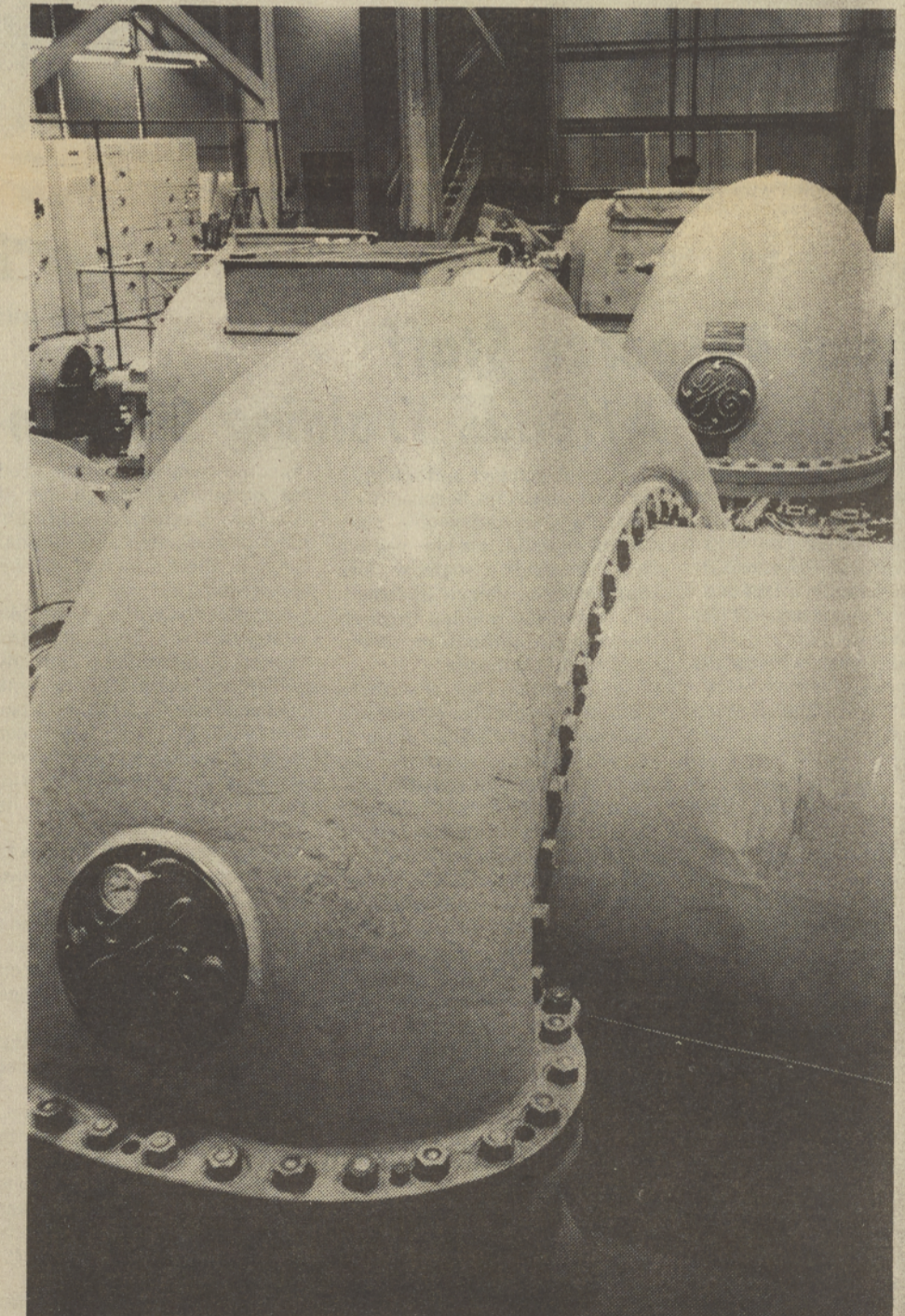
The mill itself can meet most of the need from its daily processing and clean-up operations. Andrews said that less

valuable fir shavings from the stud mill could possibly be burned as fuel while pine shavings would continue to be sold.

Meanwhile WSFPI is looking into outside sources of fuel, such as other mills. Brooks Scanlon has a continuous supply of sawdust available which can be hauled by chip trucks returning to Warm Springs after delivery. Mountain Fir Lumber has more valuable bark available, but transportation would be more difficult.

Andrews noted that as a temporary measure chips from 138 truck loads of fire-damaged logs will be brought in for fuel.

Of course the forest is an "absolutely unending fuel supply," said Andrews and when WSFPI determines its need, slash and unused logs will be hauled in and converted to energy.



Two turbines are functional and a third standby turbine is nearly complete in WSFPI's new generating facility. Bark and sawdust waste fuels the generators and when both are running the mill's power needs are satisfied. Any excess electricity is sold to Pacific Power & Light. Outside sources of waste are being sought to ensure the full-time operation of both generators.