

"THE ENJOYMENT OF ELECTRICITY"
TOWER OF LIGHT
1964

THE SCRIPT



Electric Power & Light Exhibit Production Script Revised and Timed

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(ORegon T-0440)



THE ENJOYMENT OF ELECTRICITY



CAST OF CHARACTERS

The Voice
"Uncle Ben" Franklin
Sam the Eagle
The Boy Next Door (George)
The Girl Next Door (Betsy)

PROLOGUE:

The gleaming, iridescent Pavilion of Prisims and its brilliant Tower of Light looms above and ahead as spectators ascend the gently inclined mechanical ramp. The glass enclosed ramp has gleaming copper handrails and a golden brass floor. At night it is illuminated with bright, optimistic surprise pink and golden amber lighting. The introductory music (a continuous loop) about a minute in duration, is lilting and energetic. It continues as visitors reach the loading area, where depending on their time of arrival and the size of the crowd, they wait for a minute or less. Thus the introduction will run about one minute (continuous loop) of which 30 seconds are music in the clear and 30 seconds are music under the introductory voice. The Voice is warm, friendly and mature, not pompous or "actorish."

The Voice:

Welcome to Your Pavilion of Power and Light. This is the story of the Electric Utility Industry - a saga as soaring as four hundred thousand miles of transmission lines - as intimate as your bedside lamp. It is a fabulous, factual American legend you have created - and as such dedicated to all of you with admiration and respect.

Welcome to The Brightest Show on Earth!

And at the conclusion of the Prologue visitors step on to the revolving ring. The ring also has gleaming handrails in brass or copper. Its floor texture is flecked with gold - it is indeed a brass ring with the happy optimistic connotation of that symbol. And now the music changes in mood to the somewhat awesome, mysterious introduction of The Overture of Light. There are choral voices and the pearly iridescent lighting of the loading area dims to an infinite blue.

**FIRST
CHAMBER
EPISODE ONE:**

OVERTURE OF LIGHT

The prism chamber glows with the primeval mystery of the aurora borealis in myriad shades of deep blues, emerald greens, violets and purples. The effect must be in total contrast to the golden pink iridescence of the pavilion's exterior, the night-time ramp illumination and the loading area's optimistic, pearly light atmosphere. The visual effects throughout this sequence are accomplished through dramatic light changes, graphics and color projection of still graphics. The Overture of Light music and choral voices are under The Voice. It is rather like an oratorio in feeling.

The Voice: What is light? It is the sun . . .

And a great golden light floods the area. It is almost blinding in its brilliance and quickly fades to the previous deep blues, greens and violets.

The Voice: Fire . . . The initial collaboration of nature and man in our endless pursuit of power and light . . .

And on the word "Fire" beginning at the point, growing in scope and intensity, the area glows and blazes in fiery reds, oranges and golds (general area lighting and projected flame special effects). The entire area seems engulfed in flames. We hear the flames sputter and crackle. When The Voice speaks again the conflagration fades and the light atmosphere returns to the mysterious deep blues, greens and purples.

The Voice: A single candle . . . lamps of oil, kerosene and gas . . .

Simultaneous with the above, through stylized projected graphics we quickly review the historic development of these lighting devices from the ancient Egyptians to the era directly preceding Edison. the sequence begins with a single candle, includes an ancient oil lamp, perhaps an 18th Century lantern, then a gas lamp and finally a rural American kerosene lamp of the late 19th Century. Each succeeding graphic projection remains illuminated until the series is complete and on the next words of The Voice they fade.

The Voice: Light is the beauty of the spectrum . . .

And simultaneous with this, through lighting effects our prism area becomes just that - a spectrum range of luminous colors. And now directly before the next words our lovely rainbow of colors quickly fade and once again the light atmosphere is deep indigo, violet and green. It grows even darker as The Voice speaks.

The Voice: As violent as lightning . . .

It is quite dark now. There is a clap of thunder which reverberates throughout the area immediately followed by projected (special effects) rain (which we hear) and a brilliant flash of lightning (special effects projection and lighting) followed by a sustained drum roll of thunder which echoes through the area and blends with the musical climax. The music now shifts to a magic expectancy and our original aurora borealis lighting effects return as The Voice continues.

The Voice: Light is indeed the opposite of darkness. It is enlightenment - the essential condition of vision . . . the everyday magic created by man's inspiration and industry - and above all else, to modern man, light and energy are electricity.

And on his word "vision" the deep blues, greens and violets of the aurora borealis lighting broaden to our spectrum rainbow lighting once again. and on his words "man's inspiration" we see fleetingly a projected still photograph, in sepia, of Edison and his first incandescent lamp. It is that famed brooding photograph (and might well be located in the same area where we projected the series of graphics on the historical development of illumination). As the Edison photograph fades, we see high above us on the opposite side of the revolving ring, the first incandescent lamp itself (projected graphics) and as the general lighting again dims to deep indigo, greens and violets, through a series of projected still graphics, the incandescent lamp grows larger and brighter. It reaches its maximum size and brilliance (the same size as Uncle Ben's balloon) on the final word "electricity" and dominates the area as the atmospheric lighting fades and the next sequence begins.

The quality of the music changes in character. It is brighter and more Sousa in orchestration as we begin to introduce Uncle Ben's theme. Edison's lamp, having attained its maximum size begins to fade as the area lighting becomes brighter blue and picks up another object of similar shape and indential size. At first it is seen in silhouette.

As the lighting becomes brighter we see high above us, against a background of sky blue prisms, the spherical shape of a balloon floating high in the chamber. It is contour and must resemble the last image we have seen of the incandescent lamp. The fade out of the lamp and illumination of the balloon must be smoothly executed and visually flow from one to the other with the psychological ease and effect of a film dissolve.

The festive balloon is patriotic in design, white, deep pink and blue, trimmed with the rich yellow gold of brass. Its mesh net and rigging are of brass, mounted by Uncle Ben's constant companion, an Eagle named Sam. His body is a light bulb, frequently in amber, his plumage and wings are brass. He is, of course, the symbol of the U.S., a patriotic character, factual and friendly but he can be firm and even a bit caustic at times. The balloon's decorative elements are festooned with deep pink, white and pale blue light bulbs which illuminate as it descends. Its gondola, trimmed in brass, is decorated with American flags. There is more than a suggestion of "Around the World in Eighty Days" and P.T. Barnum in its design which is gay and fair-like.

A spot light picks up the passenger in the gondola. He is Uncle Ben, a jovial, rotund character about three feet six inches in height and executed in light bulbs, lucite, electroplated wire, etc. He is an internally illuminated animated figure always surrounded by an aura of light. His mechanical animation and electronic illumination are synchronized with the script. There is much about him, his square cut glasses, tricornd hat, the cut of his clothes, suggest the editorial voice of the investor owned electric utility industry and free enterprise. Our Uncle Ben is rich in homey wisdom, somewhat sentimental, has a perpetual friendly twinkle in his eyes and loves to talk. As a character he is nearer George M. Cohan or Will Rogers than W.C. Fields. He is definitely not Senator Claghorn. Paul Ford would be a fine voice for Uncle Ben. A different though also fine characterization might be Zero Mostel. A copper kite complete with large brass key floats above his balloon and Uncle Ben might carry a long copper trimmed brass telescope. As the balloon drifts across the chamber area and descends Uncle Ben is observing the scene and spectators below. He obviously did not intend landing in a pavilion at the Fair.

Ben: Bless my stars, Sam! Where are we?

And now a spotlight concentrates on our Eagle

Sam: The New York World's Fair - The greatest concentration of science, industry and . . .

The balloon continues its descent and simultaneous with the above the lights pick up a three dimensional suggestion of the Unisphere, the theme symbol of the Fair which illuminates and a scale model of the EPLE pavilion which we are in. It also illuminates in constantly changing colors similar to the actual exterior night time lighting. Its brilliant central shaft of light shines up into the height of the chamber area.

Ben: Well, at least we saved the two bucks front gate admission. A penny saved is a penny . .

Sam: You've been saying that for centuries . . .

And now the general lighting on the ring area brightens to pick up the spectators.

Ben: And who are they?

Sam: Our friends, the consumers and investors in the Electric Utility Companies of America.

Ben: They look pretty pleased with themselves.

And now, for the first time we see on the projection screen in this area, The Girl Next Door. She is young and pert, about 19 or 20 - and extremely pretty. She has a natural, small town quality of healthy beauty, as fresh as a dish of cornflakes. She's everyone's ideal sister, a young Doris Day type. there must be nothing of the professional actress or model about her (though she should be played by a dancer-actress). She is wearing a fresh summer dress and perhaps a perky little hat. She is filmed in color against a limbo back ground, perhaps of prisms suggestive of the interior of the chamber area. The background color must match the color of the general area lighting. She faces in the same direction as the ring revolves and indeed seems to be moving with the spectators. The screen is somewhat above eye level and she is projected as a life size image. She is a bit tired, definitely lonely and dejected. She has obviously been at the Fair for hours and carries a horror of a pink and turquoise feather doll and a huge plush black and white panda, complete with satin bow, which she must have won in the amusement area.

Ben: (Simultaneous with above) All except that one. she looks miserable.

And on the screen she stops in her tracks, turns back, looks up at Uncle Ben - and almost smiles.

Ben: (Simultaneous with above) You look sort of lost young lady, may I be of service?

And on the screen she moves a tentative step or two toward Uncle Ben and Sam. Obviously she sees they're not real, but creatures of fantasy. Their relationship must develop along lines similar to that of Dorothy in "The Wizard of Oz" and that helpful trio, The Tin Woodsman, The Cowardly Lion and The Scarecrow.

Girl Next Door: The Fair's so big an' this building looked so pretty and silver . . .

Sam: (Interrupting) Silver my feathers! It's aluminum.

Girl Next Door: (Continuing) I thought it would have a fashion show - or something glamorous - but it's all about light and wires and stuff.

Ben: (To her and to a degree to all the spectators) I've a feeling you should stay. You need a guide. The Fair's no fun alone.

And now on the same screen, a few feet ahead of the Girl, we see for the first time, The Boy Next Door, a bright young man in his early 20's. He's also alone, informal in character, breezy in manner, an eager beaver, a young Jack Lemon type. He wears a pair of slacks, a sports jacket, white shirt, etc. Perhaps at first he carries the jacket over his shoulder but quickly puts it on and adjust his tie after seeing this Girl. He is filmed in the same technique and seems to be going through the exhibit with us and indeed both figures serve as a bridge between the reality of the spectators and the fantasy of the show. On Uncle Ben's words "You need a guide." he turns toward the Girl and moves back in her direction. He likes what he sees and has something important to say to her. He picks up the giant panda she's been dragging by one ear and in a mood bordering on indignation, shakes his finger at her as he blurts out:

Boy Next Door: Don't you know there's nothing we make or have - we do or see, which would be possible without electricity . . . Don't you know . . .

Girl Next Door: I don't know **you!** (But after all she's lonely and finds him pleasant looking). **Do you work here?**

And beginning on his words "there's nothing" through her "Do you work here?" we see in meaningful graphics, perhaps using the vertical prisms, Mobilcolor lighting optics and/or florescent tubing a stylized visual which in simple and dynamic terms graphically relates the tremendous growth of production and consumption of U.S. electric power throughout the past 25 years. All such statistical information throughout the show must have a distinct style, communicate instantly and employ electricity and electronics in its techniques. It must never have the visual form of a conventional chart or graph. Any story of growth and development should, when appropriate, cover the past 25 years as this is (1) prior to the birth of our Girl and Boy and (2) provides us with a consistent frame of reference extending from the 1939-1940 New York World's Fair to the present Fair. Indeed the dates and symbols of both Fairs, the 1939-1940 Perisphere and Trylon and the 1964-1965 Unisphere might well be used as our graphic symbols identifying all such statistical information.

Boy Next Door: No, but I'm studying electrical engineering - so I'm interested. Besides its the few shares of stock my folks have in our home town electric utility company that are helping me through school.

And now the lights focus on Uncle Ben and Sam once again.

Ben: (To the Girl and spectators) His name's George - 'knew one once - a destructive kid with a hatchet - but turned out rather well.

Sam: (To Boy and Spectators) **Her name's Betsy.**

Ben: (Reminiscing romantically) Knew a Betsy too - a lovely seamstress in Philadelphia - in the days before electric sewing machines . . .

George: Listen Betsy - I'll show you what all this is about .

Ben & Sam: (Together) **And we'll help.**

The general area lighting begins to fade, first on our informational graphics, then on the Unisphere and EPLE pavilion and next on Uncle Ben and Sam through pin spots remain on both as the balloon begins to rise again (it has to get into position to repeat its cycle anyway). And now on their screen George linking arms with Betsy, escorts her toward the next chamber. All lighting now dims except for a pin spot on Uncle Ben who points ahead toward the next area as the ring revolves the spectators into the next chamber.

**SECOND
CHAMBER
EPISODE ONE:**

TRANSMISSION & DISTRIBUTION

The atmospheric chamber lighting to the left of the spectators is rich golden amber which quickly changes to brilliant electric blue alive with an effect which resembles darting galaxies of even more intense electric blue sparklers, perhaps achieved through the use of mirrored reflectors - and now as specific area lighting fades up we find ourselves in the midst of a fantastic, enchanted glade of electrical technology. It is the terrain of transmission, the dell of distribution. There are lofty transmission towers in copper, brass and gleaming, colorful anodized or electroplated metals. Their copper wires span the chamber and cross the revolving ring in intricate patterns. The exotic foliage and flowers are of brilliant colored metals and clustered tiny lights in silver, sparkling greens, violets and golds. From the design standpoint, this landscape must involve the most imaginative and whimsical use of the metals, equipment and hardware of the electric industry.

Uncle Ben is comfortably ensconced in a transparent, bulb-like tree house located in a decorative brass and copper cable tree. Sam is perched on a nearby limb. The tree house is fully equipped with appropriate electric utilities and appliances (in proportionate scale) including a television set on which Uncle Ben observes Betsy and George when the spectators see them in life size on their projection screen. The background music is bright and energetic and there is a hum of expectancy in its orchestration.

The light fades up in Uncle Ben's tree house as the rest of the landscape dims somewhat. And now we see Betsy and George on their screen which is framed in foliage and creates the illusion that we see them through an opening in the lush, luminescent vegetation. They are getting on well and George is making a point to illustrate his own technical knowledge and emphasize the importance of electricity.

George: (To Betsy and the spectators) We produce more electric power than any nation on earth and as power production goes up - our standard of living climbs higher.

Betsy isn't exactly bowled over by this startling information. and now they see and recognize Uncle Ben and Sam. They look up and wave. Uncle Ben waves to them and Sam lifts a wing in acknowledgement.

Betsy: (Indicating Uncle Ben) He's climbed pretty high - 'an I know enough about electricity. Its bulbs, they come in pretty colors - and every couple of months you get a bill.

Ben: (Helping out George) Light is a fraction of the story - it's power and energy that count.

Sam: (A factual statement he's repeated many times) Transmission lines and power capacities are determined by - and follow the population densities of America.

Simultaneous with the above, lighting concentrates on a silvery blue map of the U.S. executed in gleaming metals. It is clearly a close-up of a section of the Unisphere, the World's Fair theme symbol which we saw in its entirety in the preceding chamber. And now through masses of tiny lights, black light or fibre optics, the population density pattern of America is imposed on the map's surface. It grows rapidly and builds in brilliance and is accompanied by illuminated electric light graphics with the flashing words "Population Density". And now in a contrasting color, perhaps a brilliant, molten gold or vibrant electric blue-green, through fibre optics, neon tubing or black light, a spidery growth of light expands over the population density pattern. It is the simplified interconnecting transmission and distribution map pattern as prepared by The Edison Electric Institute. This light pattern is accompanied by illuminated electric light graphics with the flashing words "Transmission and Distribution - 80% Investor Owned". The entire treatment must resemble a spectacular electric sign and the two patterns (population density and transmission and distribution) together with their identifying graphics alternately illuminate throughout the remainder of the sequence. and now we see Betsy and George on their screen once again.

Betsy:

It's a weird woods - You can't see the trees
for the technology. What's the good of a
forest without birds and crickets?

Directly following her words "What's the good of
a forest without birds" Sam looks a bit offended.
He is indeed the noblest bird of all.
Simultaneously Uncle Ben speaks and as he does,
the hum of voices under the music begins to build.
Throughout the song which follows, Betsy and
George, hand in hand, look up at Uncle Ben and
at the various elements of electrical technology
which are illuminated and activated in appropriate
accompaniment of the lyrics.

Ben:

Listen to the song of the singing wires. Listen
to the chorus of the cables. They'll tell their
own story.

The song, The Song That Never Ceases, is sung
by a female trio and a male trio. the high wire
lyrics are sung by the girls, the cable lyrics by the
boys and depending on the final vocal
arrangements, both trios will blend on the final
chorus. Uncle Ben, Sam, Betsy and George, the
illuminated Unisphere map, etc. remain
illuminated and appropriately animated
throughout the song. Accompanying it the lyrics
the high transmission towers glow in increasing
intensity (perhaps through black light) and their
wires which span the chamber oscillate in a
brilliant, ever-increasing display of fibre optics.

(Mixed Chorus, predominantly female, male or both as indicated by
vocal arrangements).

THE SONG THAT NEVER CEASES

HEAR THAT HUM, IT'S COMING FROM TRANSMISSION WIRE.
HEAR THAT VOLTAGE SINGING IN YOUR EAR
IT'S THE MUSIC OF THE ALL-ELECTRIC CHOIR
IT'S THE SONG THAT NEVER CEASES
AND THE SERVICE THAT INCREASES EVERY YEAR.

WE JOIN HANDS AND SPAN THIS MIGHTY LAND OF OURS
CARRY KILOWATTS FROM COAST TO COAST
LIGHTING UP YOUR ROOM WITH OUR ELECTRIC POWERS
WITH EFFICIENCY A-PLENTY
AND AT LOWER RATES TO BENEFIT YOU MOST.
POWER SOARING OVERHEAD
POWER SURGING UNDERGROUND ALL AROUND YOU . . .

Repeat First Stanza (if there is time in the clear, otherwise some of final
refrain with counter melody and lyrics may be under dialogue bridge
into Power Pool Episode which follows).

HEAR THAT HUM, IT'S COMING FROM TRANSMISSION WIRE
HEAR THAT VOLTAGE SINGING IN YOUR EAR
IT'S THE MUSIC OF THE ALL-ELECTRIC CHOIR
IT'S THE SONG THAT NEVER CEASES
AND THE SERVICE THAT INCREASES EVERY YEAR
IT'S THE SONG THAT NEVER CEASES
AND THE SERVICE THAT INCREASES EVERY YEAR

LISTEN TO THE FABLE OF THE COPPER CABLE
LISTEN TO THE FABLE OF THE COPPER CABLE
LISTEN TO THE FABLE OF THE COPPER CABLE, AH . . .
IT'S THE SONG THAT NEVER CEASES
AND THE SERVICE THAT INCREASES EVERY YEAR.

**SECOND
CHAMBER
EPISODE
TWO:**

THE POWER POOLS

By the end of the song all the effects have reached their maximum illumination and brilliance. On the second "Listen to the fable of the copper cable" the area lighting in golden amber and pink begins to dim up in the chamber area to the right (the power pool area). By the end of the song or a beat after, the general area lighting to the left except for the transmission and distribution map (without the population density pattern) and the brilliant glowing overhead wires, has dimmed to virtual darkness. Uncle Ben, Sam, the tree house, Betsy and George have all vanished - only the bright arteries of transmission and distribution leading to the power pool area remain.

And now there is a blaze of golden, orange and pink light in the power pool area. At first it is focused on the huge, gayly decorated cable drums which revolve as their gleaming cables spiral high in the chamber. As the cable drums and cables spin upward, the general lighting level spreads upward and becomes brighter. And now we see a team of 10 brilliantly anodized or electroplated brass and copper circus horses. The lead pair are balanced on a cable drum similar to the circular stands used by performing animals in the circus. The rest of the team, in receding perspective, spiral upward on what appears to be a shaft of light. The entire team is harnessed to an ornate circus calliope. Uncle Ben as a circus equestrian, is astride the lead horse. He carries a transmission pole in gleaming brass rather like a Roman standard and we are not surprised to see Sam, The Eagle perched atop this device. Musically there is a circus fanfare and drum-roll and perhaps Sam lifts one wing to his beak and blows a shrill whistle much as ring masters do.

Sam: (In circus billboard style) There are more than three hundred investor owned electric utility companies - their rates are regulated by government, they pay more taxes than any other industry and work together in the public interest.

There is another fanfare and Uncle Ben speaks.

Ben: (Also much in the style of a circus ringmaster) Indeed they do. It's the greatest technological team work on earth. The civic-minded electric power companies harness their horse power resources with one another to meet changing and sometimes emergency demands for electric power. This intra-national, inter-connecting pooling guarantees maximum service and minimum costs!

And on his words "harness their horse power resources" the plumed headresses of the horses twinkle with myriad tiny brilliant lights. Immediately following this, the gay trappings of their harnesses, festooned with light bulbs illuminate as does Uncle Ben's standard. As the top of the standard illuminates Sam's internal lighting becomes brighter and he whistles once again.

Ben: (Continuing immediately following these effects) These educated electric power pool equines never forget America's electrical needs!

And on his words "educated equines" the two lead steeds rear up on their hind legs in the dexterous display which is the traditional finale to most circus equestrian acts. They hold thier position and now the calliope illuminates in a glorious blaze of electrical colors and simultaneously the music builds to a final fanfare which includes calliope effects in its orchestration. Following the final musical code the lighting dims, first on the calliope, horses and cable drums and then on the area in general. Pin spots remain on Uncle Ben, his standard and Sam who is beating time to the music with his brass wings. And now all the lights have dimmed down except for a pin spot on Sam who speaks.

Sam: And as we gallop toward the bright future the Investor Owned Electric Power and Light Industry rides ahead through research!

And now all the lighting fades, the music bridges into the introduction of the research theme and we are revolved into the next chamber.

**THIRD
CHAMBER
EPISODE ONE:**

RESEARCH

The light atmosphere in the research area is brilliant, luminous green. Darting, swift pin points of brilliant light are reflected on the prism background, the elements in the stage setting, the chamber area ceiling, floor and handrails of the revolving copper and brass ring. As the lights come up we are in Uncle Ben's laboratory. Strange turbines whirl and spin, cauldrons, retorts, test tubes, etc., steam and bubble with a variety of colorful liquids and effects. Electric blue sparks flash through Tesla coils and climb a Jacob's ladder, multi-colored fibre optic cables and wires coil through the laboratory and there is a rich assortment of odd, animated, flashing apparatus we generally associate with science fiction or satires there-of. There is also a blackboard (it is green) on which is written one or more involved electro-scientific formulas. It is of sufficient size to serve as a projection screen for the research graphics to be used in this sequence. It's all rather Rube Goldberg and as the lights come up Uncle Ben is discovered hard at work on some weird electrical experiment. Sam the Eagle is sitting on Uncle Ben's cluttered lab table, perhaps in a glass bell jar similar to the vessels which housed stuffed birds in the Victorian era. Perhaps he's studying a huge scientific volume. If more desirable, Sam may be perched on a piece of the lab's equipment higher in the set. Throughout the episode Uncle Ben's tummy may bubble and change color in synchronization with the colors in the retorts, test tubes, etc. A spot light picks up Sam who looks up from his book. He watches Uncle Ben's experimentation with interest and some suspicion.

Sam:

Research conceived and developed the electric power and light industry - and today our scientists and engineers ceaselessly seek more efficient, economical sources of power and methods of transmission . . .

Throughout the above Uncle Ben continues to tinker with the complex apparatus. On Sam's last word Uncle Ben presses a lever and instantly all sorts of mechanisms spin, jiggle, whirl and behave in eccentric fashion. The entire lab and paraphernalia lights up like a huge pinball machine. There is a brilliant electric blue flash and perhaps the graphic word "Tilt" appears in an illuminated sign.

Sam: (Reacting by fluttering his wings, regarding Uncle Ben wryly and then the audience) **The results of research do not come to us in a blinding flash! Research is long, dedicated and objective study . . . practical dreaming . . . exhaustive experimentation . . .**

And on Sam's words "exhaustive experimentation" Uncle Ben presses another switch. This time there is another brilliant flash of light followed by a puff of green smoke which conceals a revolving prism unit which rapidly turns into Betsy's and George's projection screen. And now, looking somewhat surprised, they materialize. The laboratory lighting dims except for pin spots on Uncle Ben and Sam. Uncle Ben looks up at Betsy and George. He is also surprised to see that his latest experiment resulted in their appearance.

Ben: **It's amazing what research can produce! Our industry cooperates in building costly and complex nuclear power plants, experiments with fuel cells and probes the mysteries of thermo-electricity, thermionics and magnetohydrodynamics . . .**

And simultaneous with his words "complex nuclear power plants" we see projected on the laboratory's blackboard color transparencies of one or more of the electric industry's most advanced nuclear power plants, perhaps followed by an easily understood graphic depicting how an atomic power plant functions and a graphic map covering the location of existing and contemplated nuclear power plants throughout the U.S. And on his words "experiments with fuel cells", an identified, easily comprehended graphic of the fuel cell principle flashes on the blackboard. On his words "probes the mysteries of thermo-electricity" this development is graphically illustrated. When he mentions "thermionics" this innovation is graphically depicted and finally on the word "magnetohydrodynamics" we see a graphic explanation of this technique of producing electrical energy. Each such graphic is clearly identified by its key title word. George is intensely interested in all of this, Betsy doesn't dig it at all, it's way beyond her. Simultaneous with these research graphics George speaks.

George: You should have seen me with my chemistry set when I was a kid!

Betsy: (In reaction to Uncle Ben and all the involved technology) Boy, he's way out! What's he talking about?

George: (He's bluffing and doesn't really know but he wants to show off his knowledge) Why it's simple - it's just . . . it's . . .

Betsy smiles a knowing smile. She's quite pleased there's something about which he's less than expert. Uncle Ben, eager to help George out, interrupts gently.

Ben: While the technology varies - the objective is always the same - the Investor Owned Electric Light and Power Companies are united in their research efforts to provide better and more economical service to all of you.

And now the lights brighten on Sam. If he's in a bell jar it illuminates.

Sam: (To Betsy, George and the spectators) We, together with the vast electrical appliance industry, devote more effort, time and money to research for our collective futures - than any other service industry in our country - and indeed the world!

And simultaneous with his words "collective futures" George and Betsy look knowingly and affectionately at each other, head toward the next area and fade. At the same time the laboratory lighting brightens again and there is a finale spectacular electric display as the lab's apparatus, lighting and special effects virtually blow their top as do the special effects in Uncle Ben's tummy. Both he and Sam point toward the next area as the music builds and only Sam and Uncle Ben remain glowing in the laboratory area.

**THIRD
CHAMBER
EPISODE
TWO:**

INDUSTRIAL APPLICATIONS

The music has a busy, animated hum. The light quality in the prism chamber area is gleaming, orange, clear and metallic. A sizeable abstract, dynamic and spectacularly illuminated mobile sculpture of gleaming gears and cogs spins and whirls high above us. It is fabricated of silver, gold, steel blue, copper and brass anodized and electroplated metals and incorporates flashing lights to enhance the illusion of motion and speed. Somehow it suggests the industrial, technological complex of America and it is visible, active and illuminated throughout the entire sequence.

And now the lights fade up on a fantastic, gleaming aluminum and glass industrial plant. Its three high stacks soar upward into the chamber. They are of shimmering red, silver and electric blue metal and emit patriotic puffs of pink, white and pale blue smoke. We can see its interior when it illuminates and its rear wall serves as a projection screen for the episode's graphics. The plant is not specifically devoted to any one industry but must suggest advanced technology and might even remotely resemble an atomic power plant. As its interior illuminates we see an electrically controlled production line. Uncle Ben is at the control panel which has flashing lights and other electric gismos. Sam is at the other end of the production line belt which is turning out illuminated gold stars. A spot light concentrates on Sam who speaks.

Sam:

We're turning out a fine product - it's called the American economic system - and it works!

And now a spot light picks up Uncle Ben.

Ben:

Of course we've got a lot of help - just about forty thousand kilowatt hours of electric energy for every individual worker each year - which in manpower gives me and every other worker the equivalent of nearly four hundred and fifty efficient assistants. Electric energy is the biggest labor force in America. You couldn't ask for more and better help than that!

And on his words "electric energy is the biggest labor force in America" an illuminated, flashing spectacular light bulb sign above us and the industrial plant spells out the words "AMERICAN INDUSTRY" which change to the synonymous words "ELECTRICAL ENERGY". (Both phrases have 16 letters and one space between words and as soon as one phrase flashes on, letter by letter, the alternate phrase clicks on to visually suggest that the words and their meaning are indeed interchangeable and mean just about the same thing. These illuminated graphics remain active throughout the balance of the sequence. And simultaneously with this, begining on Uncle Ben's words "we've got a lot of help" and continuing until the factory interior fades, we see on the plant's rear projection screen wall a series of constantly changing color transparencies well known and some unsuauil applications of electricity to the American industrial scene. Some should be heavy industry such as automotive production lines, some lighter industries such as packaging and some even frivolous, such as dolls or toys. This series ends on Uncle Ben's words "Electric energy is the biggest labor force in America." which cues a final graphic (again employing the graphic device of the 1939-1940 World's Fair trylon and perisphere and the 1964-1965 unisphere) which clearly depicts the dynamic story of the tremendous rise in the use of electric power by U.S. industry throughout the past 25 years and the fact that today's industrial worker uses more than five times the kilowatt hours used by industrial workers in 1939-1940. This graphic remains illuminated throughout the balance of the episode.

And a beat after this final graphic appears a spot light again focuses on Sam who speaks.

Sam: Complex as it may be, no technology in our electronic, nuclear and space age exists without the thoughtful skill of your Investor Owned Light and Power Companies.

And now a spot light concentrates on Uncle Ben.

Ben: We are pleased and proud to serve the great free enterprise industries of America

Episode Three, Industrial Finale & Commercial Applications follows immediately. There is no perceptible interruption or bridge between the two sequences which are contiguous visually, orally and musically. The lights dim down on the factory but its interior, Uncle Ben and Sam remain clearly visible. Sam speaks.

Sam: There's not an industry at this great Fair - or an exhibit for that matter - which could exist without electric power and light.

And on Uncle Ben's words "we are pleased and proud" through the end of Sam's dialogue (above) at the far left end of the chamber area a great complex of electric spectacular illuminated signs and graphics of the trademarks, hallmarks and logotypes of the Fair's major exhibitors, all dependent customers of the electric light and power industry, begin to illuminate in sequence. They are square, rectangular, circular, octagonal, etc., and through the use of light (bulbs, neon, fluorescent, etc.) must in themselves suggest in abstraction, a brilliant Times Square display. Prominent among these illuminated graphics we see American Telephone & Telegraph, Chrysler, Coca-Cola, DuPont, Eastman, Ford, GE, GM, IBM, Johnson's Wax, NCR, Simon's, Schaefer's, Pepsi-Cola, etc. The list will expand as additional participants contract for space at the Fair but will be limited to those industries constructing individual pavilions. It will not include associations such as the American Gas Association or exhibitors participating in multiple use exhibits pavilions. It is considered sound industrial public relations for the investor owned electric utility industry to recognize these major purchasers of electric power and while conceivably these large industries would be willing to pay for the construction and installation of their individual identity symbols, it is recommended that in the interest of public and customer relations, EPLE absorb such costs. In this same area, suspended globes in receding perspective should abstractly suggest street lighting and the internal tubular structure of the prism chamber might be exposed to further suggest a feeling of construction and dynamic industrial growth. At any rate these electric symbols illuminate one after the other in rapid sequence, building in color, brilliance and impact. As they multiply the mobile sculpture, symbolic of U.S. industry and the flashing light bulb sign "AMERICAN INDUSTRY - ELECTRICAL ENERGY" remain illuminated. Simultaneous with all of this, Uncle Ben speaks once again from the factory area.

Ben: It isn't only industry - it's stores, shopping centers and street lighting. Why without electricity there'd be no main streets U.S.A. together we build our electric future - and it's both powerful and bright!

And on his final word "bright" the sequence has built to its maximum brilliance as has the music. Now the lighting throughout the area dims rapidly until we see only Uncle Ben and Sam glowing in the increasing darkness and finally the factory's production line of 50 golden, glittering stars which fade on the final note of the musical score.

**FOURTH
CHAMBER
EPISODE ONE:**

FARM APPLICATIONS

The background music is bucolic and becomes somewhat more dynamic and industrial throughout the sequence, except for individual songs which have their own character. The lighting is rich golden amber harvest sunlight. A large light bulb sun hangs over the area and as it brightens our set is revealed. To the left there is a stylized field of wheat and corn executed in copper and brass spangled with tiny lights. On cue it starts to grow and attains its full height, close to the chamber area's ceiling, by the end of the episode. These crops are arranged in neat rows placed in receding perspective. Toward center stage there is a neat white farm house. Uncle Ben is comfortably seated in a rocking chair (which rocks) in front of a flashing electric control board which controls all of the activities on our electrified farm. To the right of the farm house there is a red barn trimmed in white. Its three practical barn doors open on cue and reveal the livestock animals which participate in this sequence. Downstage there is a shining red electrically controlled tractor which Uncle Ben controls from his comfortable position on the farm house porch. The tractor's seat is empty in order to suggest that such electrically and electronically controlled equipment requires no manpower but Sam the Eagle is perched on the front of the tractor's hood rather like a large, proud radiator cap ornament. In the background we see in receding perspective, electric high transmission towers which grow smaller in the distance. And now as the general lighting attains its maximum level a spot light concentrates on Sam who turns to look at the audience and speaks.

Sam:

Farming, food processing, packaging, preservation and preparation - all in large measure, dependent on electric power, are our nation's largest industry. There are fewer farms each year but they've vastly increased in size. Today's farmers are just about the most important executives in the country. Summon my livestock holders!

And on his word "farming" the copper and brass wheat and corn starts to grow. And on his words "are our nation's largest industry" a series of background prisms as rear lit transparencies or revolving units reveal a colorful informational graphic which in simple terms clearly projects two compatible stories: (1): The vast increase in wheat, corn, livestock, dairy, poultry and egg production, etc., over the past 25 years and (2): The vast increase in U.S. farm kilowatt consumption throughout the same quarter of a century. Here again we might use the 1939-1940 New York World's Fair trylon and perisphere and the 1964-1965 Fair's unisphere as our bracketing graphic frame of reference symbols. At any rate the increased kilowatt story is imposed over the increased farm production story and the two alternate until the beginning of Uncle Ben's final speech. And on Sam's words "summon my livestock holders!" the first of the three barn doors open. Simultaneously we hear the introduction of the Cow's song as lighting reveals this creature. She is luxuriating in a beauty parlor chair and her hair dryer is obviously an electric milker.

The Cow:

(A rich bovine contralto).

MOO, MOO . . . MOO, MOO!
GIVING MILK IS FUN NOW
SINCE ELECTRIC'LY IT'S DONE NOW
IT'S SO MUCH SWEETER MEETING OUR
DEMANDS,
WINTER MORNINGS ARE NO STRUGGLE
WHEN ELECTRIC MILKERS SNUGGLE
TAKING THE PLACE OF FARMER BROWN'S
ICY HANDS.
MOO. MOO . . . MOO!

The cow remains illuminated, we hear the introduction of "The Happy Hams", the Pigs' duet, the second barn door opens revealing a pair of plump vaudevillian prokers. They wear jaunty straw hats, prize blue ribbon rosettes pinned to their suspenders and carry canes. They perform a sort of Ray Bolger at the Palace dance routine in tempo with their music.

The Pair of Pigs: (A somewhat Porky Pig tenor and baritone duet).

WE ARE THE HAPPY HAMS, THE HAPPY
HAMS
WHO DANCE AND CROON
SINCE PIGS EAT NIGHT AND DAY
THEY'RE ON THEIR WAY
TO MARKET SOON
A PROFIT BOON
ELECTRIC THING-A-MA-JIGS
MAKE FOR PREMIUM PIGS
AND INCREASE THE PRODUCTION BY FAR
WITH HAPPY HAMS LIKE US THE STAR!

Now the Cow and Pigs remain illuminated and we hear the introduction of The Chicken trio as the third barn door opens and the lighting reveals three fat yellow hens perched on soda fountain stools. Each stool has a large egg, there are rich sodas on the counter and our feathered gals rather suggest a trio of matrons we have frequently seen at Schraffts.

The Chicken Trio: (A Clarabelle Cluck rhythm group, probably the same girls who sing The Song That Never Ceases in Chamber Two).

WE CHICKENS ALL HAVE TO CLUCK WITH
PRIDE
ABOUT OUR FARMS ELECTRIFIED
THE EGGS AND THE CHICKS, WHY WE'RE
ALL ALLIED
WITH ELECTRICITY . . .
BROODERS ARE GREAT
CHICKS INCUBATE
WITH THE HELP OF ELECTRICITY.

Now as all three barn doors remain open and illuminated, the golden amber sunlight begins to fade into a rosy, pink dusk, the informational graphics also fade, the farm house windows illuminate and a spot light picks up Uncle Ben who speaks.

Ben: It's our blessed sunlight and water, our good earth and electricity - and the skill of the most accomplished farmers in the world - which together insure the nourishment and health of a radiant America.

And on his words "our blessed sunlight" which obviously flatters the light bulb sun, it blushes a deep pink and then fiery red as the sunset lighting effects deepen into red violet dusk. The barn doors now close, the general lighting dims except for the illumination in the farm house and pin spots on Uncle Ben and Sam and the sunset effects which attain their maximum loveliness on Uncle Ben's final words "a radiant America." And now as the music ends all lighting fades.

**FOURTH
CHAMBER
EPISODE
TWO:**

HOME APPLICATIONS

The background lighting in this prism area is the clear deep peacock blue of a summer night. Countless tiny stars twinkle in the velvety ceiling and upper rear prism wall. The music is somewhat sentimental. Perhaps we hear crickets and a nightingale. And now we see the silvery orb of a full summer moon (an illuminated transparency light box disk which is dropped or rises from behind a prism element). the increased lighting of the moon permits us to see, in silhouetted at first, the stylized suggestion of the facade of a house. And now a pin spot picks up the roof cupola and we discover Same the Eagle as a weather vane. The weather vane shifts in the direction of the spectators and Sam speaks.

Sam:

It's a lovely night. Better light, better sight!

And on his words "Better light, better sight!" the moon disk revolves or through internal lighting its surface dissolves into the circular symbol of the Gold Medallion Home with its legend "Live Better Electrically." Simultaneously or a beat after, a pin spot focuses on a window at the second or third story level of the house facade. The shutters open much as a cuckoo clock door. The interior window area is an illuminated light box and Uncle Ben looks out and down at the spectators. Perhaps he wears a night cap in this episode. He speaks.

Ben:

We live better electrically - which means the all-electric home is synonymous with comfort and convenience.

And on his words "the all-electric home" rear lighting fades up behind the scrim facade house exterior. And now we see through the scrim facade a pleasing composition of a series of fully furnished room interiors. They are not precise architectural interiors but are a stylized multi-leveled arrangement of living areas rather like a cubist painting. They are executed in forced perspective and their floors are raked so the spectators can see their interiors. Their scale, furnishing, accessories, appliances, etc., are one half to five eighth life sizes which will add to their charm and interest. They are contemporary in style and include a living room, bedroom, kitchen, dining area and perhaps basement recreation and hobby area as an appropriate setting for additional appliances.

Ben:

(Continuing)

Twenty five years ago, during the last Fair, the average comfortable American home had six - or maybe seven electric appliances . . .

And now the lighting brightens on Sam again. Gesturing with one wing or a foot, he is making a precise inventory.

Sam:

An electric iron, sewing machine, toaster, refrigerator, radio, vacuum cleaner - and perhaps an electric fan.

Simultaneous with the above and on cue with each appliance, through mechanical pop-up techniques, black light or a combination of both, these appliances executed in brilliant colors, appear in appropriate locations throughout the living areas. Their outlets and wiring connections also appear in glowing fibre optics or black light. These appliances are stylized suggestions of specific functions, not vintage models. They must be as bright as Christmas tree ornaments. And on Sam's words "an electric fan" his weather vane starts to revolve with increasing rapidity. And now a spot light concentrates on Uncle Ben again.

Ben:

Since then an average of one and a half new ingenious electric appliances are introduced to our homes each year. From color television to corn poppers - they all add to the health and happiness of the light conditioned, climate conditioned, all electric home.

Throughout the above, in rapid succession, through mechanical pop-up animation or black light techniques approximately 40 appliances, their outlets and wiring, quickly materialize. They are stylized symbols of function executed in brilliant anodized or electroplated colors rather than specific models. They appear in appropriate locations and certainly include electric blankets, a blender, bottle warmer, casserole, clothes dryer, coffee maker, corn popper, dehumidifier, dishwasher, egg cooker, floor polisher, food mixer, freezer, fryers, grills and rotisserie broilers, heaters, humidifier, garbage disposer, incinerator, pressure cooker, power tools, electric toys, an electric clock, record player, roaster, shaver, color television, waffle maker, washer, water heater, etc., and of course, central and room climate conditioning equipment and an electric range. By the end of Uncle Ben's speech the entire assembly of appliances together with their intricate network of outlets and wiring (executed in fibre optics or black light) glow in a brilliant, stylized abstract pattern in the now increasing darkness. Simultaneous with the appearance of the appliances, a beat or two after they begin to pop on, through projection or by revolving a prism section or two, we see an informational graphic which clearly depicts the great U.S. residential increase in hourly kilowatt consumption throughout the past 25 years. Here again, we might use the theme symbols of both the 1939-1940 and the 1964-1965 World's Fairs as our time identity graphic devices. And now the lights begin to dim, first on the interior, next the informational graphic. And the Gold Medallion Home symbol again revolves or desolves into a full summer moon. As Uncle Ben's pin spot dims a beat after the end of his speech, he closes his shutters and now as the stars reappear and we return to our original area lighting, a pin spot dims out on Sam who is revolving on his weather vane perch and the episode ends.



**THE ENJOYMENT OF
ELECTRICITY**



THE SCRIPT

TO BE CONTINUED