okay

welcome everybody to session four of the

OSHPD 2019 California Building Standards Code as applied to

buildings regulated by OSHPD. Today we

have

three presenters Richard Tannahill

BSU Supervisor or Building Standards

Unit Supervisor.

Dave Mason, he's a Senior Mechanical
Engineer with OSHPD and we have Bill Gow, a Senior Electrical Engineer. My name is Cesar I'm a Compliance Officer, I'll be helping with the presentation today. I'll go over some housekeeping items before we get started to let you know the presentation is going
to take roughly about an hour and a half.

You will all be muted during the presentation.

On your control panel you should see a question section within that control panel of the go to software.

Please type your questions into that section there. Keep your questions
if you have specific questions please feel free to email regsunit.oshpd.ca.gov or WebinarRoom@oshpod.ca.gov and we'll go over those email addresses one more time at towards the end of the presentation.

Please know that we'll answer as many as
but if we don't get to your question

or if we do get your question and you

want further clarification

go ahead and use those emails. We're

always happy to help.

One more housekeeping item, if we lose

you during the transmission.

We will go ahead and log out and then

log back in
and please do the same log back out

and then back in and that should take

care of the problem.

So again thank you for joining us

session four

we will be going over several

items

Electrical Code, Mechanical Code, Plumbing

Energy Code, how to remove
facilities from acute care, we'll go over

the new Remodel CAN

new Accessibility CAN and then some more

on what's coming up.

So with that being said Richard.

[Music]

Thanks Cesar, hello everyone

welcome back if you've been here before

and if not, welcome

we're going to get right into this
with a quick OSHPD update. Again we get a lot of questions about how OSHPD is responding during the Covid 19 issue right now and to be honest, we're kind of getting back to normal as far as workload. Our staff is mostly working from home. We are able to keep up with the plan
but again as mentioned before

the staff does not have all the equipment

at home as they do here so there can be some delays

but as far as our response everything's kind of getting back to business as normal as far as the actual workload.

So where we are in the code adoption
cycle in January of this year the 2019 code came into effect

and that's what we'll be talking about today.

And what we do, just a little background on how we put the codes together is, we basically start with the International Building Code

we take the last cycle of Building Code for California and carry
anything

forward. We review it carry things

forward that need to be carried forward

and remove stuff that does not. And then

we take new

items that we're currently working on

and integrate them into that.

And that's how we end up with our new

Building Code Cycle.
So today as Cesar mentioned, we're going to be looking at Electrical Mechanical and Plumbing Codes, and touch on the Energy Code and there are some other items that we'll be covering as you mentioned. Like removal from acute care, just kind of in general, not in depth at all.

So this is the session four, the last
of a four part series.

The other three sessions are getting very close to being posted to the OSHPD website. We're actually in the process of making them accessible and setting up a webinar page on the OSHPD website and that should be available so stay tuned for that. If you missed the past sessions they will be available soon.
If you do need them, you can email us at the webinar email address that Caesar gave you and it'll be posted later on and we can send you links where you can download those recorded versions. If you want the handouts should be part of your interface or dashboard for the go to
webinar.

So the handouts should all be available there, you can click on them and download them now if you haven't already done so.

As these are also mentioned we will be going through the questions at the end of the presentation so go ahead and post your questions. And we will begin with session four
starting with a Bill Gaw for Electrical Code.

Hello my name is Bill Gow and I'm going to cover the changes in the California Electrical Code primarily for Article 517. Next slide Caesar.

Thank you. So we're going to cover general items
the essential electrical system updates

and the call system restructuring.

So we’re going to go over a definition change for critical care spaces,

we added three new locations subacute units which are patient bed locations

with people sustained by life support portions of the emergency department
which are

0:06:42.000,0:06:45.759
the trauma rooms and the emergency

0:06:44.160,0:06:48.720
department

0:06:45.759,0:06:50.080
and electro convulsion therapy procedure

0:06:48.720,0:06:52.720
rooms.

0:06:50.080,0:06:55.440
So those are all new defined critical

0:06:52.720,0:06:55.440
care spaces.

0:06:56.560,0:07:02.800
Okay we also have

0:06:59.759,0:07:06.479
a requirement of 517.18 which are

0:07:02.800,0:07:09.680
general care patient bed locations
and we have a new addition here

for outpatient observation beds and

gurney locations

shall be provided with a minimum four

receptacles.

So other general bed relocations would

require eight

but these only require four, they would

have to be served from the normal branch

and some of the receptacles would have
to be served from the critical branch.

We have another update here for the critical care spaces this is the receptacle requirements and typically a critical care location would require 14 receptacles some served from the normal branch and some served from the critical branch but for
beds subject to the requirements of 517.40(B)

they shall be provided with a minimum eight receptacles. so

517.40b is the requirement for subacute beds in skilled nursing facilities and other OSHPD locations.

So next slide I'll do.

Okay so we have a change in
the essential electrical system for hospitals and other care facilities and the OSHPD amendment here reads that 517.29 through 517.30 applies to hospitals facilities subject to the requirements of 517.40(B) which is sub-acute clinical subject to the requirements of 517.45 (B) and (C). Which are again a
life safety

subacute area or a surgical center

and acute psych hospitals providing

critical care

and or general care services.

So what is a hospital-grade electrical

system look like?

A hospital-grade electrical system is

required to have three branches
the life safety branch the critical

branch which is

where patient care receptacles are

connected

task lighting for critical

outpatient care areas and equipment for

patient care.

And then we have the equipment branch

which is primarily used for your large electrical loads. So
what can serve as the alternate power source? We have a revision to the code which we allow generators which we always have and we also now can consider fuel cells. So let's take a look at the fuel cell requirements. Fuel cells can be used as the alternate power source if they meet the following requirements.
They have to comply with Article 692 which is fuel cells. They have to have a one plus one redundancy. They need to be able to assume the load within 10 seconds.

They have to have sufficient on-site fuel storage for the essential electrical system which for a hospital would be up to 72
hours.

They would have to have a connection for a portable generator which is also now required for generators in Article 700 and they have to be listed for emergency system use.

We have changes in the critical branch requirements and we'll look at those.
We have equipment that are required to be connected to the critical branch the electrical clock the sensor operated fixtures and the alarm systems for negative pressure isolation rooms and positive pressure isolation rooms, these are our existing requirements but now we have four additional requirements, medical dispensing units medication refrigerator
and freezers patient food refrigerator

single phase only

and pharmacy compounding engineering

controls, these are required to be

connected to

the critical branch.

Now we’re going to talk about the Type 2

essential electrical system used for

nursing homes
limited care facilities sub-acute not

0:11:39.120,0:11:46.560
sub-acute but skill nursing facilities

0:11:42.160,0:11:50.320
and acute psych hospitals without

0:11:46.560,0:11:53.440
critical care or general care locations.

0:11:50.320,0:11:56.959
The Type 2 electrical system

0:11:53.440,0:12:00.240
has two branches instead of three.

0:11:56.959,0:12:01.120
The first branch is life safety the

0:12:00.240,0:12:04.639
other branch

0:12:01.120,0:12:05.360
is now the equipment branch. In previous

0:12:04.639,0:12:07.440
codes
this was actually the called the

critical branch.

There is no difference between the

critical branch and the

equipment branch for these Type 2

essential electrical systems.

We have changes to nurse call in Article

517.123.

It's been restructured, the requirements

are basically the same as before,
the table in the Building Code has been updated and changed.

So you need to review that if you've been doing nurse call projects in the past.

Please review this new table, this new table has been structured that it includes the hospital requirements which is 1224 in the
Building Code

skilled nursing facility requirements

which is 1225

clinics which is 1226

correctional facilities which is 1227

and acute psych which is 1228. So again

this table has been changed, please

review it on new

nurse call projects.

And in summary I want to remind you that
hospitals are required...

I just lost the screen there cesar... all

right let me see what I can do for you,

it looks like we are back

and that was on slide 21. Yes I'll get

you there.

Sorry about that hold tight.

Okay should be good. Okay so sorry about

that

everyone. So in summary here we just want
to remind you that hospitals which are general acute care hospitals require up to 72 hours of on-site fuel storage.

The ambulatory surgical require four hours. Skilled nursing SNF's requires six hours.
Acute psych requires six hours and these requirements can all be found in Article 700.12(B(2).

We also want to remind you to look at the Remodel CAN.

When you're doing remodel projects this is CAN 2-102.6 and it can be found on the OSHPD website and when you're doing sub-acute
conversions at a skill nursing facility

please see CAN 3-517.40B

for the requirements. What you'll find in
this

CAN is that your two-branch system that
you'd use at a skill nursing facility will have to be changed to a
three branch
hospital grade system.

Other topics to review
are your optional loads in 517.31(B)(1).

You have the utility requirements in the Building Code and this is the Existing Building Code Part 10. It's been updated for dealing with OSHPD 1R Buildings and for your pv projects and your fuel cell projects,
please look at 225.30 for disconnect

0:15:20.480,0:15:22.800
means.

0:15:22.959,0:15:28.720
And that's

0:15:26.480,0:15:30.079
all I have Dave it's yours. Perfect, thank

0:15:28.720,0:15:33.600
you. Thank you Bill.

0:15:30.079,0:15:35.279
Dave go ahead. All right.

0:15:33.600,0:15:36.880
Hello everybody this is Dave Mason

0:15:35.279,0:15:39.759
Senior Mechanical Engineer here at

0:15:36.880,0:15:41.199
OSHPD in the Regs Unit and I see a

0:15:39.759,0:15:44.000
lot of names I recognize so
I'm glad you tuned in to our presentation.

And we're all struggling a little bit with these current affairs. Current things going on it makes you feel any better, Bill and I are both sitting here and it looks like we're wearing bad toupees because we're way overdue for a haircut. So
We'll get started here I'm going to go over the Mechanical Code first Part 4 and then I'll follow that with Part 5 and I'll try to make it quick.

There's a lot of information here. There's a lot of backup information I'm going to go over to kind of fill in the blanks. Cesar's
going to be running the slides for me

due to a technical glitch that we're dealing with but we should be able to get through it just fine.

Once again, thanks for tuning in so okay for general items we're going to be going over changes in Part 4 which include some fairly minor changes in the tables 4-A and 4-B
and which is the airflow ventilation requirements in filtration.

And then we'll discuss 1R considerations I want to talk about that somewhat philosophically to try to bring some clarity to it.

Because I know a lot of people are confused by that. Okay so Cesar go ahead.

Now 402.1 what we're doing is we're
taking out that banner that says not permitted for OSHPD.

Just so you know currently with the current express terms that are open for public comment we're also doing the same for 402.0.

What we're doing here is we are moving towards having these facilities, our facilities
ventilated

for per 62.1 in addition to ASHRAE 170

type of requirements and that all of

that needs some clarification which I'm
currently working on but

that's what we're doing here. Next slide

Cesar.

Okay on the neonatal intensive care

units

we have a couple new changes here. The
formulation prep

area, we have the group E, nonaspirating

supply diffusers.

And we have the low level air removal from the space.

This initially from what I understand came in as a suggestion from CDPH.

So we went ahead with it and obviously the effort here is to keep the the formula producing area very very clean.
We have the same thing in the treatment area/room.

It's kind of like the work area, where we have grouping nonaspirating supply diffusers. Same kind of diffuser you'd see in an operating room and low removal from that area. A little trivia for you there, there are occasions where they may have to do
actually open somebody up and do a

surgery in a NICU

and in an ICU, they actually do it there

in the room in some cases they don't

have time to move the patient. So

I think that's really what kind of

motivated this so it makes sense

in that light. We'll go to the next slide

Cesar.

Okay Table 4-A you'll notice we have
removed five spaces

these are spaces that are not covered in ASHRAE 170

we don't really consider them specific to healthcare,

they're general spaces by the fact that we're removing them from the table and recently removing administrative there.

We move these areas into the realm of
62.1 type ventilation.

Okay so next slide Cesar.

Thank you, now the various changes here in 4-A we're adding observation and we're adding pharmacy. Now observation was added just to keep this table up to speed with what's going on in the CBC.

In the changes in the Building Code we
want to match those of course to

serve the Mechanical Engineers designing

for those spaces, is they're going to

show up on floor plans now.

Observation being done the other

one is pharmacy

and when we made these express terms

we were

looking at, we'll get in this a little

more here but we were looking at
compounding

suites and pharmacies and changes that have occurred there in order to really control fungus contamination in compounding of some pretty serious drugs. So we'll get into that in a second here.

Go ahead Cesar.

Okay as I mentioned if you look at footnote b the change there in
Table 4-A this was brought about by a case several years ago when a compounding pharmacy had a kind of a mystery fungus that showed up in their spinal steroid that killed 65 people and then these USP regulations all of a sudden became a high priority and in our regs throughout we've been reflecting.
these changes. And that's where it shows
up here in Table 4-A in footnote

b

it references USB 797 and 800.

So that's what we're doing, next slide

Cesar.

Okay here's where we get specific in

Table

4-A at the very last, I think it's the

very last footnote now,
but note (ab) you can never have too many footnotes right.

So we're down to (ab) on this one and this is where we say space is not listed here in this table maybe for ASHRAE 62.1. Okay that's 621 is also the adopted ventilation standard in the CMC.

And that the language in Chapter 4
the CMC is

is basically just carbon copy from 62.1

the standard language.

So for what it's worth. The next table

here we have Table 4-B,

we have we're adding the HEPA filtration for the NICU

preparation area formula preparation

area and the treatment area room.
Okay so we've got HEPA filtration on those 99.97 efficiency or 17.

Next slide Cesar.

Okay what we're doing here is we're letting, we've been letting the public know for quite a while we've got these OSHPD 1R facilities Richard might help fill us in a little more on this but,
but

it does obviously provide opportunities

for healthcare providers to keep these

facilities

in their portfolio and keep them under

OSHPD jurisdiction.

However there'll be different things

going on in them. Now when I say

I want to get philosophical what I'm

saying here is for my fellow
Mechanical Engineers out there think of the systems in these buildings such that if a 1R Building happens to go down in a seismic event in the future design your system such that having the building go down will not take out the rest of the facility and not take out the critical care areas
that are

there that are seismically

compliant.

That's the main thing we're looking for

here and that gets pretty intricate

in terms of the chill water systems the

med gas systems which we can get in later.

But that's the the basic

thrust of what we're trying to do

with these changes in the code and
these changes are gonna be ongoing as we

try to refine this and

and I always I welcome your comments

from the public on this too.

Yeah so next slide Cesar.

It talks about removing loads from

compliant OSHPD 1 infrastructures

so a lot of these systems will be

separate in a 1R facility they'll

be separate
for that building not serving other buildings. Okay especially with medical gases that's a pretty hot item there and you're gonna find in some of these cases too for some of these medical campuses you'll see something like a med gas
gas source equipment maybe a chiller it

might be trying to serve other buildings

or

it might be applicable to serve other buildings. That's where you have to be careful about these requirements

Next slide Cesar.

We'll go on to Part 5 here for the Plumbing Code

and this will even be quicker
general terms,

general items here and Table 4-2

updates.

Next slide there you go, what we're doing here

doing here

is we're taking the floor drains out

of the compounding buffer or ante. So

we're taking them out of the

critical the iso standard compounding

suitet areas.
The reason for that is the traps in sewer traps they can carry bacteria and fungus that that can get sucked into the air and then contaminate the medications and it's really pertinent now. Now we're dealing with another corona, a sars type virus, that's also
going to be a factor for

plumbing traps. So and for what it's

worth here

you'll see that you, a lot of you

probably already know we have handwash

fixtures in the anterooms, in these

facilities and there's some talk now

as the knowledge is growing that those

handwash fixtures

in the anteroom probably are a source of
contamination.

Just note that maybe in the future we

might be trying to get those moved out

of those empty rooms, so

same kind of problem here. Next slide

Cesar.

Okay various changes once again here

we're just trying to keep up with the

changes in the Building Code

regarding observation units and we do
have a couple different changes in Table 4-2 on plumbing fixtures.

We have some stuff where we've got accessible to the unit toilet rooms in a corridor nearby and things like that so we're addressing that here in Table 4-2 it's nothing too big really.
Next slide Cesar.

Okay. I guess I'm on. This is Richard so

we're going to talk a little about the

Energy Code

and how it applies to health care

I first want to talk about the

codes adopted by the energy commission

typically use a commissioning process
working with the California Energy Commission.

We have shown them the TIO program that OSHPD uses and is actually in excess of what they were requiring so they are allowing us to continue using our TIO program to verify the applications being proposed or installed and we'll go over
that a little bit more.

So what's required for energy efficiency program and it's basically new elements related through A through D here. So this is HVAC systems indoor lighting systems water heating systems and the building envelope considerations. The key word
here is new elements.

0:26:01.200,0:26:05.760
If any of these things are going in new

0:26:03.600,0:26:07.360
it does require,

0:26:05.760,0:26:09.039
they are required to meet the Energy

0:26:07.360,0:26:11.840
Commission requirements Part

0:26:09.039,0:26:11.840
6

0:26:12.080,0:26:17.520
of the Building Code.

0:26:15.840,0:26:18.880
We'll go through a little bit of

0:26:17.520,0:26:20.720
elements on these

0:26:18.880,0:26:22.080
as we go through but I just want to
emphasize this is a new systems going in.

So under Section 141 it identifies the additions alteration repairs that would require compliance with the energy section and one of the things to note here for health care is any alterations to health care facilities are not required.
to comply with this section. This is specifically to, like remodels and alterations.

So healthcare facilities are exempt when they're doing remodels. Okay and healthcare facility in this sense is that per the Energy Commission is identified as any building or portion
that is licensed through the Health and Safety Code through 1204 or 1250 which is basically hospitals or clinics. I do anticipate a change of that in the future.

So keep an eye on it but for now existing health care facilities that are licensed keyword being licensed are exempt from remodel requirements.
So let's look at the definitions and how they're applied,

OSHPD versus the Energy Commission's definition of addition.

What's the difference? Okay OSHPD defines an addition as an extension or increase in floor area or height of an existing building or structure. This would be an expansion extension and an
increase in gross floor area or height.

The Energy Commission identifies addition as any change to building that increases the condition floor area and conditioned volume. That's quite a bit of difference in how we're looking at that so any newly conditioned space would meet the requirement of an addition. So you
can have a shell

0:28:18.799,0:28:22.159

space if it wasn't previously

0:28:20.960,0:28:23.760

conditioned

0:28:22.159,0:28:26.159

and now you're going to be conditioning

0:28:23.760,0:28:27.520

it, it would meet that requirement and

0:28:26.159,0:28:31.840

fall under the

0:28:27.520,0:28:33.760

requirements of an addition. Okay

0:28:31.840,0:28:35.440

so again the newly conditioned space, any

0:28:33.760,0:28:37.120

space being converted from unconditioned

0:28:35.440,0:28:40.720

to directly conditioned
or indirectly conditioned space.

So what's regulated? These are the items I mentioned before.

we're looking at envelope including walls windows roof floors and other elements this would apply to any addition expansion or new buildings.

Mechanical systems they're limited to all mechanical all new equipment
going into a building for an addition

or a new project. And basically everyone

worries about this but

the mechanical systems that are already

out there

that are available to purchase in

California already meet these

requirements.

But a basis of design is required when
using any of these four systems.

So we’re also looking at lighting systems with exceptions for specialty lighting like surgery and exam lights but your standard housekeeping lighting or general lighting, okay.

And domestic hot water systems regulating efficiency of equipment and controls, these all are
required to meet the requirements of the Energy Commission.

Then when we come down to enforcement, we do require verification of installation for led lighting. Basically the four items we just mentioned building envelope and equipment efficiency ratings will have to be confirmed.
And this is where this authority comes from in Part 6 of the Energy Code. It says an acceptance test technician or field technician can observe the installation and that any agency organization can approve the Commission to train and certify this test.
technician. This is equivalent to our IOR

0:30:31.919,0:30:34.640
system.

0:30:32.799,0:30:36.399
So this gives us the authority to use

0:30:34.640,0:30:39.520
our IOR

0:30:36.399,0:30:43.440
system to verify compliance with these

0:30:39.520,0:30:43.440
systems. Okay

0:30:43.919,0:30:48.080
so to verify this compliance there's a

0:30:46.000,0:30:48.799
new section in the TIO that has been

0:30:48.080,0:30:52.640
added

0:30:48.799,0:30:55.520
by the ISU
Inspection Services Unit it’s tab E on

the

TIO. And what you're going to be seeing

is the NRCI which is basically your compliance of installation. And there's a whole list here

goes beyond these four that are shown

here

but if any of these are being installed

the there is a certificate of
installation

that is required to be submitted and

it'll be signed off

by the inspector that it was received.

It's not the IOR's responsibility to do

these

certificates but they are

responsible for helping to gather them.

And
it's actually the design team's responsibility to administer the TIO.

So resources training and software for this program.

We're not seeing a whole lot of these come in yet but they are starting to come in.

There is a third party agency called Energy Code Ace that we have been working with to
provide modeling help. They also help with the forms and they also did some online training over the last year. This has been going on and a lot of them are recorded so you can check their website as well as attend some online training that they are still providing and kind of their
test modeling is done to show that you can meet the requirements of the Energy Code without making your hospital look like a shoebox. So they provide real world examples that have been done and meet all the energy requirements for new facilities.
These are the forms that are available

0:32:51.919,0:32:55.840
the NRCC the non-residential

0:32:53.840,0:32:57.440
certificates of compliance,

0:32:55.840,0:32:59.440
these are submitted when you do plan

0:32:57.440,0:33:02.240
review, and

0:32:59.440,0:33:04.559
they are required for the different

0:33:02.240,0:33:11.840
portions of work that you are doing

0:33:04.559,0:33:14.320
and they are submitted with your project.

0:33:11.840,0:33:14.960
Okay the green stars, things

0:33:14.320,0:33:16.720
you'll be
using these forms all the time for your sign lighting outdoor lighting and your electrical.

The red x's you'll never need to worry about solar ready or commissioning because our TIO program takes over for those. And you'll be using these other forms quite a bit as well for your envelope indoor lighting.
your performance and process and your

mechanical systems.

This is a connection at EnergyCodeAce.com

is their web address.

Again they provide ongoing training and

specific to healthcare facilities. We've

actually been meeting with them

to go through a healthcare specific

training program that they are currently
working on and that should be out

0:34:04.480,0:34:08.879

hopefully it's going to be out this

0:34:06.399,0:34:11.040

summer or late summer.

0:34:08.879,0:34:12.960

But this is their contact information.

0:34:11.040,0:34:14.720

Again they are a third party

0:34:12.960,0:34:18.800

company that is working with the Energy

0:34:14.720,0:34:18.800

Commission to provide the modeling and

0:34:18.839,0:34:21.839

training.

0:34:25.359,0:34:30.399

So this is just additional information

0:34:27.119,0:34:30.399

on the training that's available
and how does this apply to existing buildings. So if you're doing a remodel or you are exempt from these requirements.

So the area in red would not be required to be anything but if the area in red was an addition to the work now this would apply because all this equipment is new it's a new condition.
space it's new volume.

Okay so your new lighting controls the

new HVAC equipment

and on the ventilation shaft all

that would have to meet the requirements

of Part

6. Okay again,

these only acquired new elements at the
time of construction and for additions
and new work only.

Okay as Dave was mentioning before there are opportunities too for saving so you can revisit the HVAC loads based on new occupancies when you're applying these and you may have different air changes or required ventilation rates that you may experience some savings, you
might re-look at the existing filtration requirements at the time again. What we're doing is looking at if you are doing a remodel even though it doesn't apply, these are times to look at the opportunities of what's in the facility and a lot of this could be applying. Especially if you're removing a building from acute care service
you don't have the same demands or requirements to be met.

So continuing on considering converting to variable volume air and determined lighting levels that would be required for specific tasks.

Okay we're actually nearing completion of this,
there's a few other things we want to

talk about is how to remove

acute care service from SPC 1 SPC 2

buildings, we're going to go over the

process again just a very high level.

Okay,

excuse me,

sorry my slides are jumping all over the

place here.

If you have a building that is
non-compliant or isn't going to meet the requirements after a certain date there only be certain type of projects that will be allowed to be done in those facilities. That's seismic compliance work or the work involved to remove it from acute care services. You can do maintenance or emergency
repair work only, I believe

that's after 2026,

that'll be coming in effect but that

there are certain dates you need to pay

attention to that were actually

presented in the first session

where each facility has to report if

they intend to keep those buildings

in an acute care service or if they're
going to remove them.

So if they identify that they're going
to remove them

then additional work can be done and the
same requirements won't be required
for upgrading to NPC levels.

If they intend to keep the building
as an acute care project
certain work has to be done with future
projects
that have to be done to make sure those

requirements are met for NPC.

Now if nothing is done then you will be

blocked from additional work other than

what's shown here

if no report is submitted.

Okay some of the things you need to

consider when repurposing or removing a

project from acute

building from acute care service is
we're going to be looking at

ingress and egress from buildings to

make sure that they don't

cross from a hospital through

a non-compliant building. As Dave mentioned before we're going to be

looking at the utility shutoffs and

disconnects

that would be required if the hospital
serving the non-acute or non-compliant building.

Looking at the smoke compartments that remain in the building to make sure that they're functioning properly and you can do protect in place. The functional uses can be applied to non-acute buildings, such
as a skilled nursing facilities and the acute psych

can go into those buildings even though it's considered removed from acute care acute psych can be located in there because they do not have the same SPC NPC requirements. You need to look at your fire alarm panels and zones. Make sure they don't overlap the
buildings and that the control panels are located in on the hospital side of any separation that's provided same with the fire sprinklers.

Your main risers need to remain on the hospital side of the fire separations and
seismic separations.

If you're removing the building and

considering

a free standing and moving it to a

local jurisdiction.

You're going to be looking at firewalls

if you're keeping under OSHPD

jurisdiction,

we're working with fire barriers which

are a lot easier
a lot less expensive to install.

So just things to consider as built/

condition assessment should be done of all facilities that are going through the process and you can have pre-meetings with OSHPD to determine to what extent you have to separate the buildings out.

Okay accessibility is big if you're going to remove the building
from acute care service and

move it to a local jurisdiction we found

that most local jurisdictions want the

building to be 100%

accessible. Now in theory all

buildings should be 100% accessible. Now

we know that's not always the case

but it is something to consider if
where if it remains with OSHPD

construction areas would be what would

be required to be made

accessible or if new uses are provided

those uses have to have

equivalent accessibility.

Is the new use going to or occupancy

going to be

less restrictive? If it is there maybe

some allowances and some benefits
moving into that new building with a lesser restrictive occupancy.

Again a lot of the stuff is covered in more detail in session one.

I mentioned the local versus OSHPD jurisdiction. So that's things that we want to consider, even free standing buildings can remain under OSHPD jurisdiction but they have to have
qualifying services within them

and those again are identified in

session one

or Part 10 of the Building Code if

you're interested in looking

that up. Licensing under

the hospital license this is critical

when you're looking at

the jurisdiction that's going to
remain under if it's going to be under

OSHPD there's going to have to be a

licensed

facility or at least under the building

must be under a hospital license.

Looking at local zoning and requirements

and restrictions

if you're putting a new use in this

building you may have new requirements

for parking
additional requirements for parking depending on the use going into there that may have to be met.

And will the site accommodate those additional requirements as well as looking at the accessibility that were required because of the change in numbers and then the time and cost involved in either taking it out of service
demoing it or moving it to another jurisdiction.

So there's a lot to consider. Actually we've already got quite a few questions on removing these from acute care service and we'll probably answer those more in detail when we do the questions and answers.
So what we’re asking you to do, is trust the process there’s a bunch of steps to get you to the point of removing the project, a building from acute care, and getting it out, either out of OSHPD jurisdiction or identified as a, what we’re calling OSHPD 1R building. Do your homework determine the repurpose.
use and the

impacts.

Okay what are you going to put in there?

If you go from what

used to be a med surg unit and you go

into psychiatric care,

there may be additional security

requirements that have to be met, there may be

separate ingress requirements for

patients
dedicated elevators. There's a lot to consider and we can help go over those items with you.

If you do a pre-meeting with us on those,

There are several projects typically associated with doing a remove from acute care service project.

What we see is a lot of projects that come to us
originally is just to relocate the
occupants the services themselves, you're
removing pharmacy, you're moving
a lab over whatever it might be.
There's a lot of projects transitioning
and getting ready for that
once that work is done. What we typically
would see is
again either a project or several
projects to start rerouting
or making safe

the utilities that are spanning from one building to other, putting in expansion joints, or flex joints, or automatic shutoffs, or quick shut offs on there. Once that is done and everything is ready then a final project is submitted would be zero construction and this can be done as a final project
as well and saying this is the final project we're doing these last bits of work and also applying to be removed from acute care.

But typically we see it come in as a non-construction project and it will actually go, once it gets reviewed and accepted it
will be verified through our seismic

0:45:14.880,0:45:18.000

compliance unit that all

0:45:16.079,0:45:20.079

requirements met and then it can be

0:45:18.000,0:45:22.560

removed from acute care.

0:45:20.079,0:45:24.000

And at that point the locals are either

0:45:22.560,0:45:25.440

notified that that building is under

0:45:24.000,0:45:27.359

their jurisdiction

0:45:25.440,0:45:29.599

or the owner is notified that is no

0:45:27.359,0:45:31.040

longer acceptable for acute care

0:45:29.599,0:45:33.040

services. And there are requirements
signage things like that, that are also required. And again, covered in session.

one in more detail

and follow the Remodel CAN, the Remodel CAN was just posted. There's a lot of good information there. Especially when it comes to reusing functions what needs to be upgraded,

what needs to be brought to current code,
and what does not.

Okay if you have questions schedule a pre-designed meeting with OSHPD. We would be happy to meet with you to discuss your project because we're finding that every one of these is different. There's different requirements based on site locations how the utilities are run.
So it's impossible for us to say this is the one size fits all fix for this. So again go ahead and contact your regions and get a meeting scheduled and we do have people that are, what they're calling a repurposing task force that will be helping would be basically those on the this webinar today would be assisting in this process.
Okay document the decisions to become conditions of approval. Okay again, what was discussed, what's going to be required just document these so that we, you have a record when you come back in and these are the things that need to be met and these have been done. And it could be ongoing projects that you've been doing
in the past can be applied to meeting these conditions.

Okay plan reviews to be conducting in the appropriate region in accordance with the conditions of approval. Again we do, we would be happy to meet with you discuss options but the regions will ultimately
doing the review and processing it prior to it going to the seismic compliance unit.

Again I mentioned the Remodel CAN we're not going to go through this in any detail but it has been updated.

There's a lot of good information here.

We've been getting a lot of requests for presentations
on this and it is being used quite extensively right now. So I would encourage you, if you haven't looked at it yet go ahead and download it from our website and take a look. It basically takes you to the process of what you're trying to do, what you're trying to achieve, and how you get there. There's a bunch,
there's flow charts in it for each discipline Electrical, Mechanical, Fire, Architectural, that you can apply to your project.

Again there's going to be another webinar on this in the future. We did the whole one-day seminar in it with the HBSB Hospital Building Safety Board last.
November

0:48:17.440,0:48:23.440 on the Remodel, on Remodel specifically

0:48:21.200,0:48:24.319 but we will be doing a future webinar on

0:48:23.440,0:48:26.720 just the CAN


0:48:28.640,0:48:32.240 So final thoughts here, kind of talk to

0:48:30.800,0:48:33.680 you a little bit about what's coming up

0:48:32.240,0:48:36.880 what we're working on,

0:48:33.680,0:48:39.119 we're in the middle of the 2019

0:48:36.880,0:48:42.240 Intervening Code Cycle.
We’re out for, currently here with public comment.

If you are interested at all you can go to the Building Standards Commission website and download what is being proposed for the next cycle. A lot of it is going to be clarification to the OSHPD 1R that came out in the 2019 cycle. There's a lot
of confusion

about when and where it was applied, the

OSHPD 1R

showed up in a lot of the banners

where it could possibly apply

but just to clarify we're making it real

clear

that whatever

use or occupancy that you're putting
into that building

is the code requirements that apply to

that space.

So you won't have requirements for a 1R Building but you will have requirements or a OSHPD 2, 3, 4, 5, whatever it might be probably not gonna be a 4 in there.

But that's ongoing so, if you haven't looked at that and you're
interested go ahead and download it. You can ask any questions, make some comments, be welcome to respond to them.

This is what we're currently working on in the Intervening Cycle, a special seismic certification for routers and equipment, a special seismic certification for fluoroscopy and
x-ray and that's not where we're going
to require seismic certification for
fluoroscopy.
But what it's, basically what we're going
to be allowing is for CT's to receive
that seismic certification
and meet the requirements for that. Again
I apologize my slides keep trying to
jump ahead on me
must be a timer on it. Pin 68 was also

released, this is clarification of

anchorage for equipment. You have your

mobile

fixed and movable equipment.

There's also going to be some additional

definitions

that are answered with that but if you

have not

looked at Pin 68 yet I would encourage
you to download it and take a look at

that

it really clarifies how this stuff,

what equipment needs to be anchored,

what can be detectable.

Especially when it comes to movable and

mobile

it defines the difference between those

two.

I think they want us to wrap up, they
keep changing the slides here.

Changes to materials for steel and masonry are clarified.

I'm sorry I'm trying to read ahead here

at modifications to the SPC-4D requirements, there's some benefits for the pounding analysis

that may not be required under certain conditions.
So that can save a lot of money in analysis and analyzing the buildings that are adjacent to each other.

Again making refinements to the OSHPD requirements and coordinating Section 1224 with new technologies.

I'm glad I'm off of that slide. Let's see if this one stays still for a while.
Okay the California Building Standards Code alignments we're working with CDPH trying to align with CMS. There's a lot of questions on the fuel requirements for both hospitals and skilled nursing facilities. A lot of rumors going out there that they're going to be requiring 96 hours worth of fuel. Unfortunately,
there's probably some truth to that.

We are currently working with them to try to clarify what's going to be required, when it's going to be required, who it's going to affect.

Our Building Code states six hours for skilled nursing facilities but they're referring back to NFPA 110.
the 2010 version does require 96 hours

worth of fuel

and this is ongoing discussion. So

we'll keep you informed on that and

what's happening with that.

And looking at the emergency. I'm going
to rip through these so we're not
fighting the slides here, emergency
department revisions just

know looking at requirements that
might be required for,

like reserved OR's for emergencies

enhancing trauma room standards.

Energy code requirements again, we went through that today

if you have any questions that let us know. And emergency operations, we're getting a lot of questions right now what code changes are going to be coming
with because of this COVID 19 outbreak.

We're looking at clarifying requirements for surge and infrastructure availability. One of the things we're finding is that the oxygen piping that is installed in hospitals was not designed...
for constant use

by everyone at the same time. So if they

have a lot of

respirators going continuously we're

seeing that there might be some

concerne there might be some

bottlenecking going on there. So we're

looking at that as well.

Major research stuff that we're looking

at working on
in the future is the chemical dependency programs revising the levels of OSHPD 3 clinics. There's actually current regulations out there to evaluate those requirements. This thing is all over the place again I apologize. We're looking at protective
environment standards high medium and low, this is primarily for like interventional or bone marrow transplants, things like that, different levels of protection. So we're not requiring surgical environments where they don't need to be, That's ongoing with CDPH. A lot of these
initiatives are currently put on hold due to the pandemic but they will be addressed probably in the 2022 Code. And we are working with CDPH they are currently rewriting Title 22. So we're updating that. Removing building standards from title 22, making sure they're in title 24
and working with them actively on that.

Again a little bit about delay due to the current situations.

And this is where we're talking about the imaging room, procedure room, versus operating room, a lot of the diagnostic services have been provided in the past have morphed into interventional services and
they require a

more a higher level of

sanitation so we're looking at those

requirements.

I know a lot of facilities are affected

by that when they're updating equipment.

So don't be surprised if you're being

asked for functional programs listing

procedures for your imaging equipment
replacements because those

0:56:21.280,0:56:26.160
are being asked for, and are being

0:56:28.839,0:56:31.440
required.

0:56:30.160,0:56:33.760
One of the things we’re looking at

0:56:31.440,0:56:36.880
for 22 is going 100%

0:56:33.760,0:56:39.760
electronic, right now we do allow paper.

0:56:36.880,0:56:41.440
We're probably good 98% electronic

0:56:39.760,0:56:45.839
reviews right now

0:56:41.440,0:56:45.839
and

0:56:46.240,0:56:50.720
but we are going to the point
where we're going to be requiring all electronic reviews.

So if you're interested in what we're doing or want to be part of what we're doing I would ask that you get involved.

You're welcome to attend our Hospital Building Safety Board meeting, committee meetings, we have code meetings. The current one is
scheduled I believe for June or is being rescheduled for June. Where we discuss future code issues that are coming up. We review anything that we change or even proposing a change goes through vetting of the Hospital Building Safety Boards code committee. So I would encourage you
to attend if you're interested and

get involved in the process.

So with that we're going to move on to

questions.

I don't know if this thing is going to

continue to jump around. Yes it is

so we'll go ahead in the qa

and we'll see if we can lock down one of

these screens otherwise the screen may
So what I'm going to do is I'm going to head back to the initial slide on this presentation, don't know what's going on really but we'll get through some of these. Some of these questions. A lot of great questions that came in throughout the presentation. So again
we'll try to answer as many questions as we can.

if you find that we did not answer your question feel free to email us again at regsunit@oshpd.ca.gov and the second email, as a second option would be fddwebinar@oshpd.ca.gov.
So with that being said we have a

question regarding electrical

and this is like going to be for you

Bill.

First question we have is

on critical care beds for receptacles

required

is there a different number for an NICU

or

CV ICU?
Wow excuse me,

change in requirement for NICU beds

or any other critical care beds

it's 14 receptacles. Now when it says

receptacles

duplex receptacle does count as two

receptacles so

at least seven duplexes are

14 simplexes or any other combination

that is
that you come up with. All right thanks

Bill I got another question for you.

This question deals with the emergency generators and the question reads

requirements for emergency generators 96 hours fuel storage instead of 72 hours

do you need a reserve tank for 72 hours

beyond

what is part of the generator set as
required by licensing?

Yes that’s a good question and

Richard touched on that briefly about

96 hours. OSHPD’s requirements were as shown

24 for hospitals

72 for hospitals with NPC-5 ratings

and then six hours for skilled nursing

four hours for

ambulatory surgicals and those
requirements can be found in Article 700.12b

and to continue on that, so what you need is actually 72 hours of fuel capacity and your tank would be sized actually for 96 hours of fuel because you'll hit the low low fuel level at 72 hours and you need 133%
more capacity and that gets you to 96

Now to talk about the CMS requirement

like Richard was talking about that

is because CMS enforces

NFPA 110 2010

and there is a requirement for

facilities with seismic zones

I believe it's c d e and f to have 96
hours of fuel

or capacity, I guess you would say.

Richard mentioned that

there's ongoing conversations, is that

required for hospitals and skilled

nursing facilities. What is CMS's true

requirement

and we'll have more on that later.

Perfect thanks Bill I got one more

question for you in terms of fuel cells.
The question is in terms of fuel cells

I'm unaware of any products listed for emergency use or OSHPD seismically certified, was this included in the 2019 to encourage the use of fuel cells or are there already pre-approved products? Yes, that's another great question, fuel cells was added to the model code
to encourage

the possible development of fuel cells

for emergency systems

and the question is correct that I'm not aware of any product that's listed for emergency use. So there's not one that actually is available that I'm aware of I have talked to a couple of
fuel cell manufacturers and they don't

have a product yet

but the code change would maybe
develop this market.

Changes to this requirement are

continuing and getting refined in

NFPA 99

and then the next edition of NFPA,

well, National Electrical Code so fuel

cells
are in the code but like the

question said there's not a product

that's listed at the moment.

Yes if I can follow up on that Bill, yes

the reason they put it in there is to

encourage the development of such

systems

and that's why we identified the

requirements if you did apply it they
would still have to meet the same requirements as a diesel generator, such as the 10-second start-up time, things like that.

So currently as Bill mentioned they do not meet that requirement but where if someone did come up with a system that did, they would be able to use it.
Thank you Richard. Perfect I have one

more question for you Bill

and this has to do with low voltage

data voice and data network connection.

So the question

reads does OSHPD Electrical Codes
govern the low voltage requirements such

as voice

and data network connections and sensors

and devices
which require PPOE? YES there's a lot of excitement with a power over ethernet

and it's being used for a lot of different applications it was originally developed for voice over i p phones and wireless access point but now we're finding nurse call systems with power over ethernet and access control power over ethernet and then even
lighting power

ethernet. So the requirements are in the Electrical Code Article 725 and Article 800 or power ethernet and so we'll be applying those in addition though there is a requirement for mechanical protection and for mechanical protection systems it's
and then you'd also look at 517.80. And

what it says

is you have an exception that

class 2 wiring class 3 wiring

does not need mechanical protection if

and

only if it's used for communications and

signaling systems.

Well power ethernet to lighting is not a
signaling system

or a communication system so that would be required to be mechanically protected i.e it would have to be in conduit,

metal conduit most likely. So you need to meet the mechanical protection requirement when you're doing power or ethernet if it's not a signaling system
or a communication system and

be aware of that

issue. Perfect. Thank you Bill

for that, that's a lot of good

information

appreciate the code sections as well for

those attendees that can reference those

code sections as applicable.

So moving on to mechanical, Dave we have
some questions for you

dealing with mechanical exhausts. First

question we have for you

is for low level exhaust/return

grills,

is a dimension required by code to the

top, bottom,

or where is it? Yes I saw that question

from Mark. Mark

the answer there is, it's to the bottom
of the grill.

Perfect I got another question for you regarding mechanical.

It reads for mechanical requirements is a shelled space considered an occupiable space?

You know historically what we do when we look at those, they come in and we find that they actually are used for storage and other uses
in which case we've historically said

ventilate them

for storage or administration. But we're

always

open for discussion on them they can be

a source of infection and

and you have to think about what

they're doing I recently saw a project
where they had three

1:06:34.400,1:06:38.960
operating rooms going in the third one

1:06:36.559,1:06:41.920
they were going to keep is shelled space

1:06:38.960,1:06:43.599
and in that they were going to actually

1:06:41.920,1:06:45.520
put a positive pressure into it

1:06:43.599,1:06:47.280
because they were going to ventilate a

1:06:45.520,1:06:48.160
result was still a functioning operating

1:06:47.280,1:06:49.760
room in which case

1:06:48.160,1:06:51.280
you would take contaminants from that

1:06:49.760,1:06:53.280
room and force it into the adjacent
operating room or adjacent spaces like a clean corridor. So it varies you know we have discussions on this all the time when they come in and we're definitely open to suggestions when the designers submit them. So hopefully that answers your question.

Perfect. Thanks Dave I have one more for you regarding
the Mechanical Code it's dealing with

duct
testing. Question reads you stated that
duct
testing is required for shafts but the

Energy Code says it must be

unconditioned spaces

and also that there had
to be
25 percent I think of the ductwork is in this location since most ductwork is in a conditioned space, why would testing be required?

That's interesting I'm not familiar with that requirement and in fact our duct testing is, I don't think we've adopted that for health care in Part 6 at this point, maybe Richard will remember that but
I don't think that it's in there not actually looking at duct testing for Part 6.

So I don't know where that information came from and I apologize for that but I welcome follow-up. Whoever asked that question my phone number is 916-440-8445 so give me a call on the phone and I'll
be glad to help out with that.

Perfect, thanks Dave. Moving on to the Plumbing Code

OSHPD requires both Table 4A and 62.1 tables on drawings, is that correct?

Yes that's Mechanical Code but yes this question I think came in from Warren Chang and I really
appreciate this question. This is a big topic because I'm on the ASHRAE 170 Technical Committee. So ASHRAE 170 has historically pointed designers to 62.1 for areas both covered in ASHRAE 170's medical areas and those that are not they say you can
ventilate per 62.1 for any space.

But I imagine Warren and a lot of the other mechanicals out there have looked into this, you start doing the math, you go down that rabbit hole and what you find is when you go to 62.1 you have these factors, like $r_{suba} a_{subp} d$ for diversity ventilation efficiency EV. And you realize those factors are not
established for health care

so now what do you do? Well you end up

with something that's

very soft and willy-nilly and it's very
difficult to enforce and you can't

establish minimums for your outdoor air

intakes.

So what we're going to be looking for

here on these, is
yes in the design documents for areas

1:09:23.839,1:09:27.759
that you're ventilating per 62.1.

1:09:25.839,1:09:29.600
We do want a ventilation table so I'm

1:09:27.759,1:09:33.359
glad Warren asked this

1:09:29.600,1:09:34.880
now. So you know I'm interested in doing

1:09:33.359,1:09:35.920
a webinar just on this subject because I

1:09:34.880,1:09:38.000
think it's worthy of it.

1:09:35.920,1:09:39.520
It's a lot of information and even when

1:09:38.000,1:09:43.359
I was at the ASHRAE 170

1:09:39.520,1:09:45.199
Tech Committee meeting in Orlando
a colleague of mine here from Sacramento actually presented on this and then information kind of goes out there, and just fades away and I want to give the designer something I can really use and follow. So I'm open to doing a webinar on this in the future. I've also written text for a CAN
for this code application notice

and if this keeps moving forward I

will be taking the mathematics in that

CAN and

integrating into this 2022

CMC. Okay so we will be looking for

tables

the thing is with 62.1 and

anything you ventilate with it
we're going to be different than most

AHJ's. Most AHJ's don't

really even look at that and probably

don't have the understanding

between behind these other

factors, like

a sub p and d and I don't

think a lot of them even verify these

ventilation rates. But us being in

healthcare we have to
and we have to make the patients the priority. So I've got the math put together on how to do that and if Richard will allow me you guys can reach out to me and I'll share my CAN text. My draft CAN text with you and I'll pester Richard about this, I'll put him on spot right now Richard. But I'd like to share this because I
think this is a direction we're going to have to go with real clarification almost like a user's manual for designers on how to ventilate these facilities. So yes we will be looking for stuff we can verify for both styles of ventilation in the design documents. Thanks perfect thanks Dave. So don't go
away just yet I've got another question

for you.

Question reads why are isolation

valves between

OSHPD and non-OSHPD buildings allowed
to have manual valves,

by the time anyone gets there all the

water will have drained out of the pipes?

Yeah we've had those discussions here

you know and I'll be honest with you
from a mechanical engineering standpoint

I'm really open

either way on these on these things I agree. There probably is a time and place for automatic valves and so I'm definitely open for that.

The one exception I would certainly take to that would be anytime you have a med gas type system if you look at NFPA
there is zero mention of automatic valve for class one

med gas. The reason for that is, if one malfunctions people die so other than that I'm definitely open to automatic valves.

We have a lot of good smart designers out there that I think can certainly integrate these things in fine.
We'll be open to suggestions on that.

Okay perfect I got another one for you

Dave,

question reads does the code require AC 156 seismic certification for plumbing and HVAC piping systems?

You know it's actually not to dodge that one but that's something that we have
reviewed by our structural engineers here for seismic.

Any seismic requirements in model code will apply and also ASCE 17 modifications that are in the Building Code that are addressed by our seismic engineers those will apply also and there's a list in there I want to say it's section 1705 of the
Building Code I'm just going off memory here.

But I have notes at my desk anybody can reach out to me and I'll send you a scan of those sheets out of the Building Code to give you a list of what's required for seismic with mechanical and plumbing systems and what’s not. And
then you add that to whatever's in the

1:13:08.800,1:13:13.199
model code

and those apply. Now for me

in the mechanical and plumbing codes I

1:13:14.560,1:13:19.120
don't have any amendments

in Parts 4 or 5 that I've added

1:13:19.120,1:13:22.560
for seismic.

Okay but i'll definitely help

1:13:22.560,1:13:25.120
point you in the right direction if you

1:13:23.600,1:13:27.600
reach out to me.
Perfect, and this is more of a design question so you may have an answer for it or not but we'll ask anyway. Sure. So when a med room and a nurse station are combined do we need to provide one hand washing station to each area or one for both is sufficient provided that they have access to the sink?
Okay yeah this is a great question, you know me sitting here as a dumb mechanical engineer if I see that on a set of plans it would be clear to me that it would make sense to have one handwash fixture for that space.

Okay but the other question I have is I would go to the architect that is
reviewing it here

1:14:00.159,1:14:03.600
and I say can they combine those two

1:14:01.679,1:14:05.679
spaces together, I don't know,

1:14:03.600,1:14:07.280
you know and often in questions like

1:14:05.679,1:14:08.800
this the architect will look at and say

1:14:07.280,1:14:10.239
no these need to be two separate spaces

1:14:08.800,1:14:11.360
they can't combine them.

1:14:10.239,1:14:13.679
So hopefully that you

1:14:11.360,1:14:15.360
understand that's my answer

and just make sure that you're meeting
the Building Code on the spaces and

and how whether or not they can be

combined. Okay I can add to that Dave.

Okay what you're going to look at, is if

a room is required

you're doing a med room

it requires a four walls and a door,

at least

walls and a door and if a sink is

required in that room
you cannot put it on the other side of

the door. An example would be a nourishment area, a nourishment area does not, is not required to have a door.

So the hand washing fixture for a nourishment area can be shared if it's within like adjacent to a nurse station or something
like that. Typically

1:14:56.400,1:14:59.600
med rooms have to be secured and they

1:14:59.040,1:15:01.280
would

1:14:59.600,1:15:04.719
be required to have their own hand

1:15:01.280,1:15:04.719
washing fixture within the room.

1:15:06.320,1:15:10.320
That's perfect thanks. Thanks

1:15:08.159,1:15:12.080
Dave and Richard for that.

1:15:10.320,1:15:13.760
We have, that was the last of our

1:15:12.080,1:15:14.080
plumbing questions. We have roughly

1:15:13.760,1:15:16.560
just
under 15 minutes to go over the last remaining questions. You have one from Wenlin Lee right, on goosenecks?

Do you have it in front of you Dave? If you don’t. Yeah I was looking at it earlier.

Go ahead let me look real quick, yeah here we go I think I have it, yeah.
Can you clarify the OSHPD code interpretation for the gooseneck faucet?

I love getting this question because this just keeps coming up.

Can we clarify the OSHPD's code interpretation for the gooseneck faucet requirement and why previously approved flat gooseneck is not approved that's a great
question. I really appreciate

1:15:52.080,1:15:57.760
it, very quickly

1:15:55.520,1:15:58.880
these are infection control instruments

1:15:57.760,1:15:59.920
right, they're not really I don't see

1:15:58.880,1:16:03.280
them as sinks.

1:15:59.920,1:16:04.320
They are infection control

1:16:03.280,1:16:05.679
instruments and they allow

1:16:04.320,1:16:08.239
obviously the staff to clean their hands

1:16:05.679,1:16:11.440
very well and and there's

1:16:08.239,1:16:13.040
if you look at CPC Section 210, it's the
definition of how much fixtures. Now for

some reason we keep having to massage

this

description, this is definition for

how much fixtures. And there's a few

things involved

you have non-hand touch

to control these, you can have wrist

paddles or sensors but you can't have a

knob with,
you touch with your hands. You have various other things that enhance the infection control aspects of this. One of them is the gooseneck now if my snarky reply would up to this would always be hey just google it, you know if you go to google and type in gooseneck faucet and then hit images
what do you see? You see something that's got a smooth 180 degree turn around maybe 175 degree turn around return on it and it does terminate above the top of the fixture and it has room to get your hands and elbows underneath it often, that's a gooseneck. Now why do we have a gooseneck? A lot not a lot of people don't know
this but the old theory behind it is

that if you have that gradual

turnaround

in that gooseneck you get a coriolis

effect and that the flow comes through

spinning,

it comes out spinning. So when the valve

closes at the base of the gooseneck

that fixture drains very well. If you

don't have that you have
you have more abrupt transitions in the
direction of flow

you disrupt that and it doesn't drain

very well. This is a theory

behind it

but there's very little information out

there on this, okay and

this is a theory that i've just kind

of inherited and
I've kept going so far anybody

1:17:36.800,1:17:41.280

out there that says no this isn't true

1:17:38.560,1:17:42.239

and it has information for me I

1:17:41.280,1:17:44.560

welcome it

1:17:42.239,1:17:46.159

because I'm open to suggestions on it

1:17:44.560,1:17:48.719

and we are approving

1:17:46.159,1:17:49.920

the definition. Up until now has been, has

1:17:48.719,1:17:52.159

had some

1:17:49.920,1:17:54.239

some wiggle room in it in order to make

1:17:52.159,1:17:55.760

sure we get gooseneck faucets. We are
currently

redefining this definition in the

current express term so go look at those

and give me your comments officially

if you’d like because we’re going

to be enhancing the

the definition for how much fixture a

little more just to clarify this

but thanks for the question

and give me a holler if you want
to discuss it more.

Thank you, perfect, thanks Dave

for that and thank you

everyone for submitting these questions

these are great questions

and again we're going to try to

answer as many as we can we still have a

list

of items to go through our questions to
go through and we have

1:18:31.280,1:18:35.360
roughly about 10 minutes left so with

1:18:33.840,1:18:36.080
that being said we're going to move on

1:18:35.360,1:18:39.120
to

1:18:36.080,1:18:42.480
Richard and Energy Code.

1:18:39.120,1:18:45.360
So the question is for you is

1:18:42.480,1:18:47.199
if I add a new chiller in a remodel

1:18:45.360,1:18:49.520
wouldn't the chiller

1:18:47.199,1:18:51.040
efficiency itself need to meet Title 24

1:18:49.520,1:18:52.960
Energy Code or
would it still be exempt since it's a remodel?

When you purchase it you're going to meet the requirements State of California, that's always required for new equipment.

Now the remodel itself is not, does not have the requirement for the basis of design and so I think there's a question
on the basis of design as well.

So the requirements are made a little different, the equipment's going to be the same, yes, you need to make install a listed or certified system that meets the requirements for the State of California that's why I was mentioning if you replace an air handling unit or a water heater or
something it's still going to meet

1:19:31.679,1:19:35.120
the requirements. So the impact to a

1:19:33.920,1:19:37.520
project

1:19:35.120,1:19:38.719
shouldn't be additional cost to meet

1:19:37.520,1:19:40.560
this requirement.

1:19:38.719,1:19:43.760
There might be some extra hoops you have

1:19:40.560,1:19:45.199
to jump through to show the compliance

1:19:43.760,1:19:47.679
and that's where the basis of design

1:19:45.199,1:19:49.440
comes in and to be honest a lot of it

1:19:47.679,1:19:51.199
if you have specific questions on the
Energy Code we would suggest that you contact the Energy Commission. I believe they have a hotline because all we're doing is processing the paperwork on this end, we're not evaluating the feasibility of the product.

Perfect, thank you. Thank you Richard. I have a question on basis of design.
Can you please expand on the definition of a basis of design requirement?

Again all we're requiring is the certification of compliance the NRCC be submitted with the plans so if there are additional requirements that are by the Energy Code I would suggest you contact
the Energy Commissions

1:20:36.639,1:20:43.520
hotline. Again we're accepting the

1:20:40.320,1:20:45.280
NRCC's and we, after installation we

1:20:43.520,1:20:48.639
require the NRCC's the

1:20:45.280,1:20:50.320
certificate of installation to show that

1:20:48.639,1:20:53.360
they complied with the work

1:20:50.320,1:20:55.360
and we're not inspecting either of those.

1:20:53.360,1:20:56.400
Perfect I got a question on the

1:20:55.360,1:20:58.800
replacement of an

1:20:56.400,1:21:00.000
air handler, so the question reads would
a replacement of

an air handler with greater capacity be

required to comply with the CEC

regulations

or would it be exempt?

Again similar to the first question we

got on that the equipment itself when

you purchase it, it's going to have to be

listed.

Now if you're talking about is this
considered a remodel or versus an equipment replacement again, it depends what the information provided that's not clear you have more capacity how much more capacity doubling it in size,

you're going to have to probably have a new project. It's not considered an equipment replacement
when we're doing equipment replacements

1:21:34.639,1:21:40.880

you are allowed to replace equipment

1:21:38.000,1:21:43.520

and it is a project but it should be

1:21:40.880,1:21:45.120

equal to or similar in size

1:21:43.520,1:21:46.639

and we're looking at weights, we're

1:21:45.120,1:21:47.520

looking at anchorage, there's a lot of

1:21:46.639,1:21:51.199

other factors

1:21:47.520,1:21:51.520

involved with that and some not so much. I

1:21:51.199,1:21:53.520

think

1:21:51.520,1:21:55.199

energy compliance here would be the
least of your concerns because the product itself is probably going to be already listed for sale in California.

Next question reads if I repurpose an SPC 1 or 2 hospital building will it then have to meet current Title 24 Energy Code?

That's a good question, there's ongoing discussion on that as of now I
if again you would have to meet the remodel requirements or the alteration requirements of the Energy Code for that new project but we are looking at that as well.

So I'm sorry I apologize I'll have more information for you on that but that is
an ongoing question that we have and we don't have a definitive answer but as of right now the way it's written what the confusion is, is the buildings are still considered hospital buildings if they become 1R and there's an exception for licensed facilities but is that a licensed building or not.
So there's a lot that goes into that but if the use, say if you're gonna turn into an administrative building you probably have to meet the requirements of the occupancy for the Energy Commission for alterations. That's how we're currently looking at it. So you're gonna have to meet the
requirements for energy for that new use
going into that building.

That doesn't mean you have to go back

and replace all your windows or

roofing or hvac units or anything like

that

but if you are replacing those things

anyway, yes they're going to have to meet

that requirement.
Perfect. Next question, so

this question might be for you Richard

or

Bill in or a combo dealing with

alternate power

and solar lighting. So the

question reads is there

documentation in reference to what

elements

if any can we utilize solar power or
alternate power sources in OSHPD buildings for example

site lighting building signage accent lighting etc?

Can you repeat that question. Sure the question reads

is there documentation in reference to what elements if any we can utilize solar power or
alternate power in sources

for sources in OSHPD buildings for

element site lighting

building signage and accent lighting?

Okay so

there is no restriction on putting solar

on the normal branch

of the electrical system and

so I want to stay away from the term
alternate because alternate energy

1:24:42.639,1:24:46.800

sources

1:24:44.000,1:24:47.360

the other branch of a power source for

1:24:46.800,1:24:49.120

the

1:24:47.360,1:24:50.719

essential electrical system but yes if

1:24:49.120,1:24:54.000

you had a

1:24:50.719,1:24:56.400

solar light fixture perhaps I

1:24:54.000,1:24:58.719

I don't know, I can't think that we

1:24:56.400,1:25:00.639

wouldn't allow it.

1:24:58.719,1:25:02.320

Richard you got any more. Yeah we're
actually doing a lot of projects where

they are providing either fuel cell

solar power as an alternate source of

normal power to the the projects

if you're meeting the power requirements

for that facility

that's fine, your emergency power

still has to be there

and there should be a main for if that

one system fails
it defaults to the other normal power or utility power but yeah those projects are coming in and I would suggest if you're interested in that you would either, you can contact us here and see what the process would be but basically it's really not even an alternate method
of compliance it's just meeting the code
requirements for that facility.

All right, kind of sticking with the
 electrical we have one question that
came in towards the end

and the question Bill this is for you.

Confirming that the four hour
emergency power for ambulatory
surgery is just for

I occupancy/license space right?
The four hours is for ambulatory surgical which I believe is an I-2 I-2.1 and so yeah that's what we're talking about.

Perfect. Yeah I'd like to actually expand on that. An example of this if you're adding a subacute to a skilled nursing facility Bill mentioned that you'd have to be
required to add that third branch

that would be only for that area of the building that's being served

by that service so the same thing would apply here

you would only have to provide the additional service for the area that's actually providing that service
and I just want to add that the

requirements for clinics

can be found in 517.45.

Perfect thank you. Thank you both for that.

Next question is past conversations that there were some new CAN's being posted for this remodel as well as maybe for covid have some of those been posted, how would
we be notified of this?

What was the question? The question reads

past conversations were that there are

some new CAN's being posted for this

remodel

as well as maybe for covid have those

been posted yet

or how would we be notified of this?

It's not really clear on the question

but I'll try to answer it.
The remodel CAN has been posted, it was posted in November and is available or downloaded on the OSHPD website. There is also a new CAN coming for accessibility that should be posted hopefully in the next few weeks. There is a PIN, PIN 4 that they've been using for the
COVID

1:27:55.040,1:28:01.920

to allow for rooms to be negatively exhausted with

1:27:58.719,1:28:03.840

minimal construction if any without a permit.

1:28:01.920,1:28:04.960

You would have to look at it as originally written for TB and is now being applied to the coronavirus.

1:28:03.840,1:28:05.920

1:28:04.960,1:28:08.480

1:28:05.920,1:28:09.360

1:28:08.480,1:28:11.810


As far as us responding if anything else actually there is nothing coming out specifically for COVID.

If a project is being done as a surge or an emergency situation for the COVID situation it is be handled on a case-by-case basis and there are no regulations to go with that. The condition is that they are removed
once this crisis is over they cannot be permanent installations, 

once they become permanent they do need a permit, need to go through the full process. 

However they can be expedited. 

Perfect and this is going to be the last question for our webinar today and this has to do with removing
buildings from acute care services. So

the question is

can you describe the process after

OSHPD's approval to close the loop

with other agencies to justify licensed acute care or supplemental services having been removed from SPC 1 facility? Okay I did see that question earlier and I did
try to touch on that when I was talking about removal from acute care.

I said there's a whole process a whole series of projects that have to be done to remove the project from acute care.

The final stage at OSHPD it actually does go up to our seismic compliance unit they review the project and confirm that it has met all the requirements for removal.
and then is actually changed in our system as a 1R that's where the 1R came from it's a way to track these buildings once they are removed from acute care but yet remained under OSHPD jurisdiction.

We do send out a letter to local agencies
when they are being transferred to their

jurisdiction if they remain

under OSHPD jurisdiction there is

nothing else required.

So I’m not sure what the requirement is

for other agencies when you do work

in those buildings. If it's under OSHPD

jurisdiction it will come

to us we will actually be reviewing

those under Standard Building Code for
California.

Basically we call it model code but it's for California for the types of uses that go into those buildings.

The if it does go to the local agencies they are notified that, that building they actually have to approve that the acceptance of that and they are notified once the process is done that.
it is being transferred to them there's

a letter that goes out

to them. Perfect thank you so much and

with that being said,

oh sorry Bill would like to add

something?

Thank you Bill. Yeah I just wanted to,

got passed a note from a friend and he
wanted to remind me that ambulatory surgical centers can also be B occupancies, so the four-hour requirement is for an ambulatory surgical regardless of the occupancy. So that's all I have.

Perfect thank you Bill, and again we want to thank you we here at OSHPD want to thank you for joining us on for session four of our four-part
series on the 2019 Code Update Webinar Series. If you have any questions that did not get answered or you think of any additional questions please please feel free to email us at FDDwebinar@OSHPD.ca.gov or RegsUnit@OSHPD.ca.gov and just to let you, everyone know we are dedicated to providing more informational webinars, and with
that being said please

feel free to email us any suggested webinar topics that you’d like to see more

webinars on and lastly but not most importantly please get involved with the code development process whether it be with the California Building Standards
Commission

1:32:08.560,1:32:13.920
or sign up on our listserv to receive

1:32:11.600,1:32:15.840
automatic notifications of what we have

1:32:13.920,1:32:18.320
going on here at OSHPD.

1:32:15.840,1:32:19.840
Again thank you so much and we hope you

1:32:18.320,1:32:27.840
enjoyed the webinar.

1:32:19.840,1:32:27.840
Have a good rest of the day

1:32:30.239,1:32:32.320