Suppose *demand* is interpreted relative to a modal base f and ordering source g, where f maps an individual x and a world w to {w': w' is compatible with x's beliefs in w} and g is the set of propositions demanded by x.

(1) $[[\text{demand}]]^{f,g,w}(p)(x)$ is defined only if

(i) $f(x,w) \subseteq \text{domain}(p)$
(ii) $f(x,w) \not\subseteq p$
(iii) $f(x,w) \cap p \neq \emptyset$

when defined [$\max_{g(x,w)}(f(x,w))$ is, roughly, the set of worlds in f(x,w) that belong to a maximal number of propositions in g],

(2) $[[\text{demand}]]^{f,g,w}(p)(x) = 1$ iff

$\forall w' \in \max_{g(x,w)}(f(x,w))\ p(w) = 1$

Then, (3)a&b are defined only if Bill believes that the either Max will read all the books or Max will read none. Assuming the modal base and ordering source stay constant, this predicts that any subsequent statement that Bill demands some book-reading should be infelicitous, as you note. I agree with this. The contrast between *every* and *the* is pretty clear.

(3) a. Bill demands that Max read these books.
b. Bill doesn't demand that Max read these books.

(4) Bill doesn't demand that Max read these books.
#But he does demand that he read some

(5) Bill doesn't demand that Max read every book.
But he does demand that he read some.

So, for (3)a&b to be defined at a world u, it must be the case that (6).

(6) $\forall w' \in$ {w: w is compatible with Bill's beliefs in u}
Max reads all books in w' or Max reads no books in w'

Let's look at a couple concrete scenarios. Consider a world **u** where Max reads Bill's guidelines for the course and they say:

(7) RULE 1: You will read all these books or write a report.
g(Bill,u) = {{w: Max reads all these books in w or Max writes a report in w}}

Is (3)b true in **u**? Yes. And we predict this, so long as Bill believes in **u** that Max will read none of the books, if he doesn't read them all. Why? The modal base divides into four kinds of worlds:

(8) [w1] : Max reads all the books and writes a report
[w2] : Max reads all the books and writes no report
[w3] : Max reads no books and writes a report
[w4] : Max reads no books writes no report

The first three classes are all equally good by the ordering source. The last class is not maximal under the ordering source, so we don't worry about it. There is a g-best world in f in which Max doesn't read all the books, so the sentence is true.

Suppose we move to a world **u'** that is like **u** except the rulebook also contains the following statement:

(9) RULE 2: You will read at least one of these books.
g(Bill,u') = {{w: Max reads all these books in w or Max writes a report in w},
{w: Max reads one of these books in w}}

What are the facts? How do we judge (3)a&b in **u'**? I find it very hard to judge. By contrast, (5) is clearly true in **u'**.

(3) a. Bill demands that Max read these books.
b. Bill doesn't demand that Max read these books.

(5) Bill doesn't demand that Max read every book.

Part of the difficulty of judging may be that someone who writes RULE 1 and RULE 2 is pretty clearly considers it possible that you will read some but not all the books. So, it is unnatural to accommodate the presupposition in this scenario. If by brute force we assume Bill thinks Max reads all-or-none, I think the (3)a sounds true and (3)b false, as they should. In a modal base that entails that Max reads all-or-none, [w1] and [w2] are the g-best f-worlds in **u'**.

<u>Consequences</u>

Suppose *permit* has the same modal base and ordering source as *demand* and when defined,

(10) $[[\text{permit}]]^{f,g,w}(p)(x) = 1$ iff

$$\exists w' \in \max_{g(x,w)}(f(x,w))\ p(w) = 1$$

Given this, we predict that in any scenario in which (3)b is true (11)a is infelicitous. Assuming (3)b is felicitous, there is no world in f in which Max reads some but not all these books. (11b) comes out true in world **u**, but not of course in **u'**.

(11) a. Bill permits Max to read some but not all these books.

b. Bill permits Max to read none of these books

The first result seems wrong. Intuitively, one should be able to say the following sequence of sentences:

(12) Bill doesn't demand that Max read these books.
He permits Max to read some but not all the books.

Though this seems wrong it also predicts that (13) is infelicitous, which is good:

(12') Bill doesn't permit Max to read some but not all the books.

Then again, all these predictions depends on the meaning I gave *allow*, which I haven't though a lot about…

We do make some other good predictions, I think. If we assume the truth of (3)b, some of the problematic implications you mention come out infelicitous given presuppositions (ii) and (iii) in (1).

(13) a. #Bill demands that if Max doesn't read all the books, he read none.
b. #Bill demands that Max not read some but not all the books

(13a) is infelicitous because the embedded clause is entailed by the modal base. (13b) is infelicitous because the embedded clause is incompatible with the modal base.

So, at least, we can get many of the potentially problematic implications to come out infelicitous. A small victory perhaps.

Heim 1992 motivates presuppositions (ii) and (iii) for *want*. Heim admits they have problems, though. For example, it seems possible to want what you believe can't come true:

(14) I want this weekend to last forever.

I don't know if you can demand something you know won't come true. This relates to the question you ask as to whether it's possible to say the demand worlds are always a subset of the belief worlds.

I don't know if I want to say this story is right, but it's perhaps not terrible…